AcerPower F2
Service Guide

Service guide files and updates are available on the AIPG/CSD web; for more information, please refer to http://csd.acer.com.tw

PRINTED IN TAIWAN

Revision History

Please refer to the table below for the updates made on AcerPower F2 service guide.

Date	Chapter	Updates

Copyright

Disclaimer

The information in this guide is subject to change without notice.

Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Conventions

The following conventions are used in this manual:

Screen messages	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

Table of Contents

Table of Contents

System Specifications

Overview

AcerPower F2 is a versatile, high-power system, supporting Intel Socket 478 CPUs. The computer uses Peripheral Component Interface (PCI) and Accelerated Graphics Port (AGP) design. This improves system efficiency and helps the system support varied multimedia and software applications.

- Intel Pentium 4/Celeron CPU
- System Memory DDR 266/33/400, 2 DIMM Slots, expendable to 2GB
- Power Management function
- 3.5 inch floppy drive
- CD-ROM, DVD-ROM, CD-RW (52x/24x), DVD/CD-RW combo or DVD writer
- High-capacity, Enhanced-IDE drive
- Support USB 2.0 high performance peripherals
- 3D quality audio system via onboard audio controller
- Audio-in/Line-in, Audio-out/Line-out, Headphone out and external Microphone in Jacks

Features & Specifications

CPU

- Support Intel Pentium 4 / Celeron (Socket 478) processor
- Support Intel Hyper Threading Technology

Chipset

- Intel 865GV + ICH5

Memory

- DDR SDRAM PC2100(DDR266)/PC2700(DDR333)/PC3200(DDR400) 184-pin, 2 DIMM Slots, expandable to 2GB

Graphics

- On-die VGA
- 1 VGA port

AGP/PCI

- Three PCI 2.2 5V slots

FDD

- One FDD slot supports 1.44MB/3 mode 3.5” devices

IDE

- Slot Type: 40 pin IDE slot
- Slot Quantity: 2
- Transfer rate support:
  - PIO Mode: 0/1/2/3/4
  - Ultra DMA 66/100/133
- Storage Type support:
  - HDD/CD-ROM/CD-RW/DVD
  - Zip 250
- ATA-100 transfer rate

Audio

- 3D quality audio system via onboard audio controller
- Connectors support:
  - Line-in/Line-out (rear)
  - Microphone-in (rear)/Microphone-in (front) (Default)
  - Headphone Out (front) (Default)

LAN

- Supports 10/100MB ethernet environment

USB

- Connectors Quantity:
  - On-board: 4 (rear)/2(Front)

- Connector Pin: 4
- Transfer Rate:
  - USB 2.0/1.1

BIOS

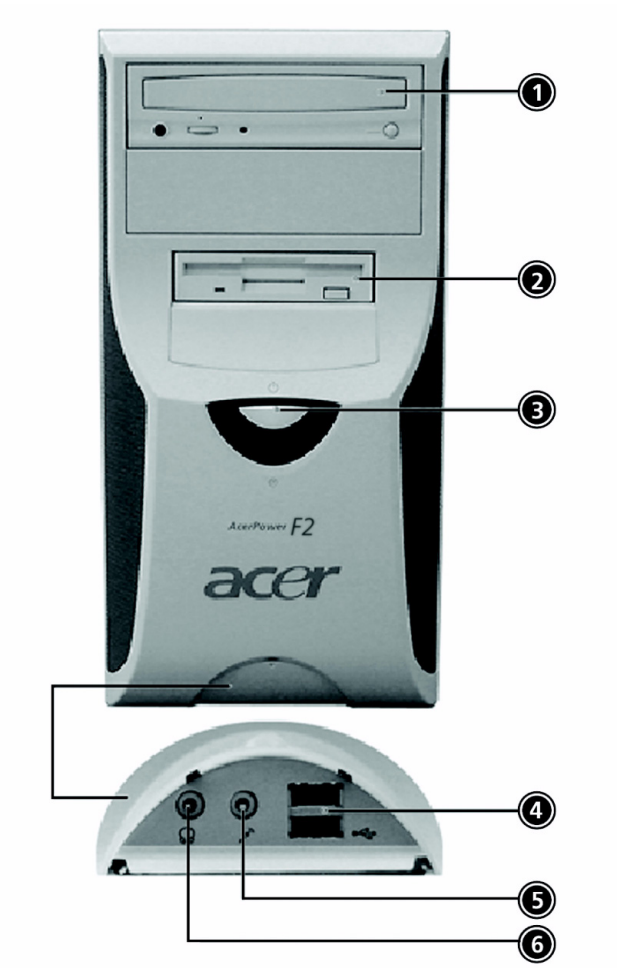
- Award BIOS with Plug and Play BIOS
- ACPI, SMBIOS 2.3, Green and Boot Block
- Provides DMI 2.0, WFM 2.0, WOL, WOR, chassis intrusion and SM Bus for system management

Others

- Suspend to RAM/Disk
- PC2001 Compliant
- Support PS2 Keyboard/Mouse and USB Keyboard/Mouse wake up function

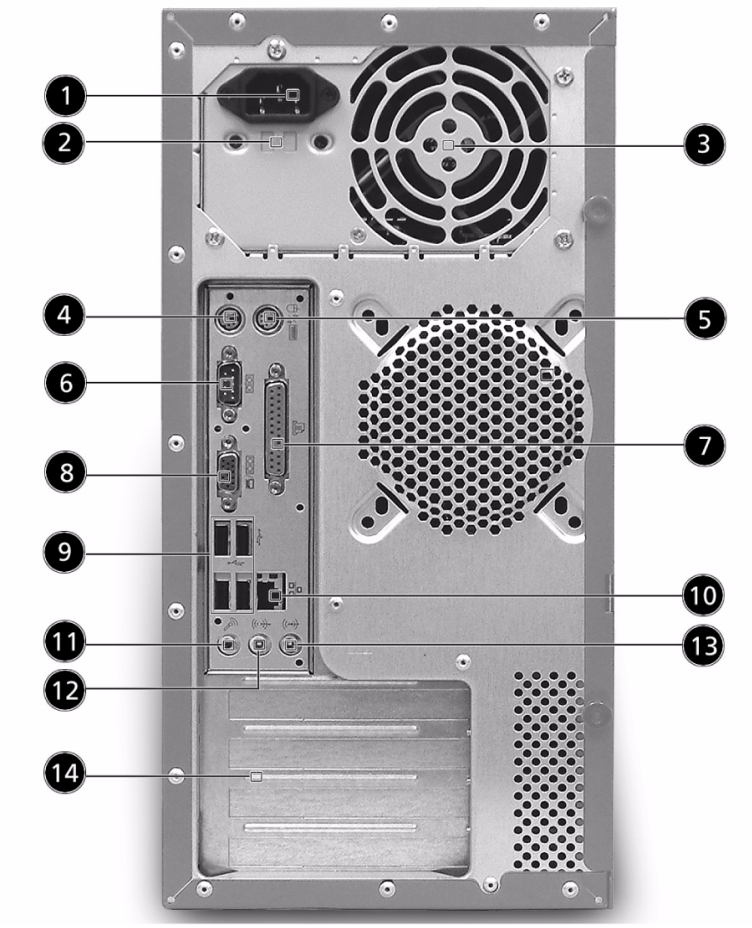
AcerPower F2 Front Panel

The computer's front panel consists of the following:



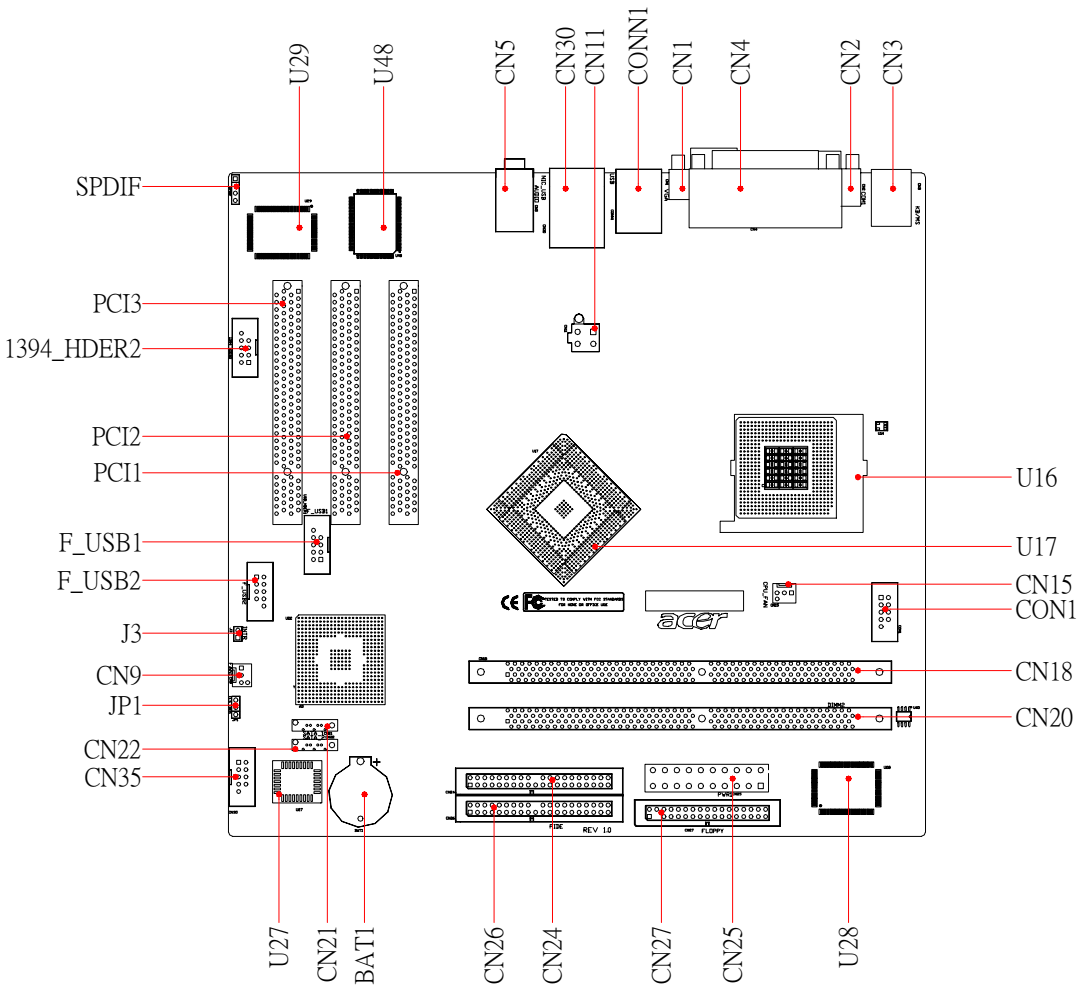
Label	Description
1	Optical Drive
2	FDD Drive
3	Power Button
4	Universal Serial Bus (USB) Ports
5	Microphone Jack
6	Speaker/Headphone jack

AcerPower F2 Rear Panel



Label	Description
1	Power Code Socket
2	Voltage Selector Switch
3	Fan Aperture
4	PS/2 Keyboard Port
5	PS/2 Mouse Connector
6	Serial Connector
7	Printer Connector
8	Monitor Connector
9	USB Connector
10	RJ-45 Ethernet Connector
11	Microphone Jack
12	Line-Out Jack
13	Line-In Jack
14	Extension Card Slots

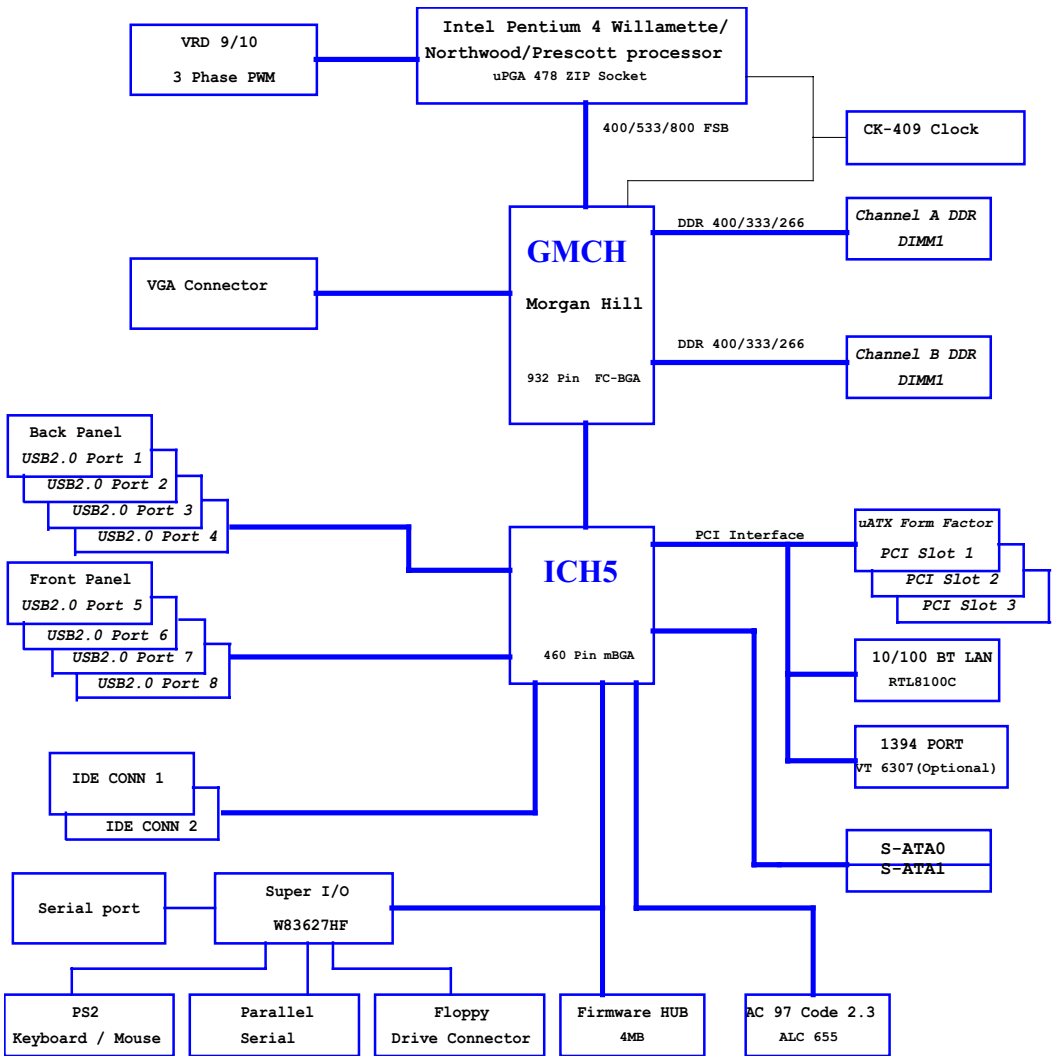
MainBoard Layout



Lable	Component
1394_HDER2	1394 Connector
BAT1	Battery
CN11	12V Connector
CN15	CPU Fan Connector
CN18,20	DIMM Port
CN2	COM1
CN21,22	S-ATA Port
CN24,26	Primary IDE Connector, Secondary IDE Connector
CN25	Main Power Connector
CN27	Floppy Connector
CN3	PS2-KBMS
CN30	Dual USB & RJ45
CN35	Front Panel Header
CN4	Parallel Print Port

Lable	Component
CN5	Audio Port
CN9	SYS FAN Connector
CON1	COM2 Header
CI\ONN1	USB Port
F_USB1,2	Front USB Connector
JP1	Clear CMOS
PCI1,2,3	PCI Slot
U16	478-pin CPU Slot
U17	865GV Chipset
U27	BIOS
U28	I/O Connector
U2	Audio Controller, Nearby U29
U29	1394 Controller
U48	LAN Controller

Block Diagram



System Board Major Chip

Item	Specification
System Core Logic	Intel 865GV W83627HF (Champion I/O Bridge) ICH5 (Champion South Bridge)
Super I/O Controller	W83627HF
LAN Controller	RTL8100C
Memory Controller	Build in Intel 865GV (Champ North Bridge)
E-IDE Controller	Build in ICH5 (champion South Bridge)
Keyboard Controller	Build in W83627HF
RTC	Build in ICH5

Processor

Item	Specification
Type	Intel Pentium 4 Northwood processor in Flip Chip Pin Grid Array (FC-PGA) package
Slot	Socket 478
Speed	Depends on CPU, which is local configured
Bus Frequency	400/533/800 MHz
Voltage	Processor voltage can be detected by any system without setting any jumper

BIOS

Item	Specification
BIOS code programmer	Award
BIOS version	v6.0
BIOS ROM type	LPC Flash ROM
BIOS ROM size	4MB
BIOS ROM package	32-pin PLCC package
Support protocol	PCIX 1.0,PCI 2.2,APM 1.2,VESA/DPMS (VBE/PM V1.1), SMBIOS 2.3, E-IDE 1.1, ACPI 1.0b,ESCD1.03, PnP 1.0a, Bootable CD-ROM 1.0, USB 1.1, UHCI 1.0, ANSI ATA 3.0 ATAPI
Boot from CD-ROM feature	Yes
Support to LS-120 drive	Yes
Support to BIOS boot block feature	Yes
BIOS Password Control	Yes

NOTE: The BIOS can be overwritten/upgraded by using “AFLASH” utility (AFLASH.EXE).

BIOS Hotkey List

Hotkey	Function	Description
DEL	Enter BIOS Setup Utility	Press while the system is booting to enter BIOS Setup Utility.

System Memory

Item	Specification
Onboard Embedded Memory Size	0
Memory Socket Number	2 Sockets
Supported Memory Size per Socket	128 MB/ 256 MB/ 512 MB/ 1024 MB
Supported Maximum Memory Size	2GB (1024MB x2)
Supported Memory Speed	266/333/400 MHz
Supported memory voltage	2.5 V
Support memory module package	184-pin DIMM
Support to parity check feature	Yes
Support to Error Correction Code (ECC) feature	Yes
Memory module combinations	You can install memory modules in any combination as long as they match the above specifications.

VRM

Function	VRM Specification	Typical Voltage	Power Source	Maximum Output
CPU VRM	VRM10	0.8375~1.6v	12 Voltage	91A
CPU VRM	VRM 9.0	1.1-1.85 Voltage	12 Voltage	70A

Cache Memory

Item	Specification
First-Level Cache Configurations	
Cache function control	Enable/Disable by BIOS Setup
Second-Level Cache Configurations The information below is only applicable to system installed with a Pentium 4 processor	
Tag RAM Location	On Processor
L2 Cache RAM Location	On Processor
L2 Cache RAM type	PBSRAM (Pipelined-burst Synchronous RAM)
L2 Cache RAM size	Depends on CPU, which is local configured
L2 Cache RAM speed	Full of the processor core clock frequency (Advanced Transfer Cache)
L2 Cache function control	Enable/Disable by BIOS Setup
L2 Cache scheme	Fixed in write-back

LAN Interface

Item	Specification
LAN Controller	RTL8100C LAN Controllers

LAN Interface

Item	Specification
LAN Controller Resident Bus	PCIX Bus
LAN Port	ONE RJ-45 on board
Function Control	Enable/Disable by BIOS Setup

IDE Interface

Item	Specification
IDE Controller	Built-in ServerWorks CSB5 (Champion South Bridge)
IDE Controller Resident Bus	PCI bus
Number IDE Channel	2
Supported IDE Interface	E-IDE (up to PIO mode-4, DMA mode 2 and Ultra DMA-33), ANSIS ATA rev. 3.0, ATAPI
Supports LS-120	Yes
Supports bootable CD-ROM	Yes
Function Control	Enable/Disable by BIOS setup

Diskette Drive Interface

Item	Specification
Diskette Drive Controller	Build-in NS W83627HF super I/O controller
Diskette Drive Controller Resident Bus	LPC Bus
Supported Diskette Drive Formats	1.44MB, 2.88MB format and slim type diskette drive
Function Control	Enable/Disable by BIOS Setup

Serial Port

Item	Specification
Serial port controller	Build-in W83627HF Super I/O Controller
Serial port controller resident bus	LPC Bus
Number of serial port	2
Serial port location	CON1,CN2
16550 UART support	Yes
Connector type	9-pin D-type female connector
Optional serial port I/O address (via BIOS Setup)	3F8h 2F8h 3E8h 2E8h
Optional serial port IRQ (via BIOS Setup)	IRQ4 IRQ11

USB Port

Item	Specification
Universal HCI	USB 2.0
USB Class	Support legacy keyboard for legacy mode

Memory Address Map

Address	Size	Function
0000000 - 009FFFF	640 KB System Memory	Onboard DRAM
00A0000-00BFFFF	128 KB Video RAM	Reserved for Graphics Display Buffer Non-Cacheable
00C0000-00CFFFF	32 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D0000-00D3FFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D4000-00D7FFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D8000-00DBFFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00DC000-00DFFFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00E0000-00E7FFF	32 KB for SCSI BIOS	Reserved for SCSI BIOS
00E8000-00EFFFF	32 KB	Reserved Onboard
00F0000-00FFFFF	64 KB BIOS	System ROM BIOS (ROM) System RAM BIOS (DRAM)
0100000-0F9FFFF	System Memory	Onboard DRAM
0FA0000-0FFFFFF	384 KB I/O Card Memory	Reserved for Memory Map I/O Card Non-Cacheable
1000000-FFFFFFF	System Memory	Onboard DRAM

PCI INTx# and IDSEL Assignment Map

PCI INTx #	PCI Devices	Device IDSEL: ADxx
INTA#	ADIMM-slot	N
INTB#	PCI-Slot1	AD16
INTC#	PCI-Slot2	AD17
INTD#	PCI-Slot3	AD18

PCI Slot IRQ Routing Map

PCI INTX#	INTA	INTB	INTC	INTD	Bus Mastering
PCI slot 1	INTBJ	INTCJ	INTDJ	INTAJ	Enabled
PCI slot 2	INTGJ	INTFJ	INTEJ	INTHJ	Enabled

PCI Slot IRQ Routing Map

PCI INTX#	INTA	INTB	INTC	INTD	Bus Mastering
PCI slot 3	INTFJ	INTGJ	INTHJ	INTEJ	Enabled

I/O Address Map

Hex Range	Devices
000-01F	DMA Controller-1
020-021	Interrupt Controller-1
040-043	System Timer
060-060	Keyboard Controller 8742
061-061	System Speaker
070-071	CMOS RAM Address and Real Time Clock
080-08F	DMA Page Register
0A0-0A1	Interrupt Controller-2
0C0-0DF	DMA Controller-2
0F0-0FF	Math Co-Processor
170-177	Secondary IDE
1F0-1F7	Primary IDE
278-27F	Parallel Printer Port 2
2F8-2FF	Serial Asynchronous Port 2
378-37F	Parallel Printer Port 1
3F0-3F5	Floppy Disk Controller
3F6-3F6	Secondary IDE
3F7-3F7	Primary IDE
3F8-3FF	Serial Asynchronous Port 1
0CF8	Configuration Address Register
0CFC	Configuration Data Register
778-77A	Parallel Printer Port 1

IRQ Assignment Map

IRQx	System Devices	Add-On-Card Devices
IRQ0	Timer	N
IRQ1	Keyboard	N
IRQ2	Reserved	N
IRQ3	Serial Port 2	Reserved
IRQ4	Serial Port 1	Reserved
IRQ5	Reserved	Reserved
IRQ6	Floppy Disk	Reserved
IRQ7	Parallel Port	Reserved
IRQ8	Real Time Clock	N
IRQ9	N	Reserved
IRQ10	N	Reserved
IRQ11	N	Reserved
IRQ12	PS/2 Mouse	Reserved
IRQ13	Numeric Processor	N
IRQ14	Embedded Hard Disk	Reserved
IRQ15	Reserved	Reserved

NOTE: N - Not be used

DRQ Assignment Map

DRQx	System Devices	Add-On-Card Devices
DRQ0	N	Reserved
DRQ1	N	Reserved
DRQ2	FDD	N
DRQ3	N	Reserved
DRQ4	Cascade	N
DRQ5	N	Reserved
DRQ6	N	Reserved
DRQ7	N	Reserved

NOTE: N - Not be used

Environmental Requirements

Item	Specifications
Temperature	
Operating	+10 ~ +35°C
Non-operating	-20 ~ +60°C (Storage package)
Humidity	
Operating	20% to 80% RH
Non-operating	20% to 80% RH
Vibration	

Environmental Requirements

Item	Specifications
Operating (unpacked)	5 ~ 16 Hz: 0.015 mm 16 ~ 250 Hz: 0.21 G
Non-operating (packed)	5 ~ 27.1 Hz: 0.6 G 27.1 ~ 50 Hz: 0.016 mm 50 ~ 500 Hz: 2 G

Mechanical Specifications

Item	Specification
Dimensions(main footprint)	190(w)x320(H)x360(D)mm

Power Management Function (ACPI support function)

Device Standby Mode

- Independent power management timer for hard disk drive devices (0-15 minutes, time step=1 minute).
- Hard disk drive goes into Standby mode (for ATA standard interface).
- Disable V-sync to control the VESA DPMS monitor.
- Resume method: device activated (Keyboard for DOS, keyboard & mouse for Windows).
- Resume recovery time: 3-5 sec.

Global Standby Mode

- Global power management timer (2-120 minutes, time step=10 minute).
- Hard disk drive goes into Standby mode (for ATA standard interface).
- Disable H-sync and V-sync signals to control the VESA DPMS monitor.
- Resume method: Return to original state by pushing external switch button, modem ring in, keyboard and mouse for APM mode.
- Resume recovery time: 7-10 sec.

Suspend Mode

- Independent power management timer (2-120 minutes, time step=10 minutes) or pushing external switch button.
- CPU goes into SMM.
- CPU asserts STPCLK# and goes into the Stop Grant State.
- LED on the panel turns amber colour.
- Hard disk drive goes into SLEEP mode (for ATA standard interface).
- Disable H-sync and V-sync signals to control the VESA DPMS monitor.
- Ultra I/O and VGA chip go into power saving mode.
- Resume method: Return to original state by pushing external switch button, modem ring in, keyboard and mouse for APM mode.
- Return to original state by pushing external switch button, modem ring in and USB keyboard for ACPI mode.

ACPI

- ACPI specification 1.0b.
- S0, S1, S3 and S5 sleep state support.
- On board device power management support.
- On board device configuration support.

System Utilities

Most systems are already configured by the manufacturer or the dealer. There is no need to run Setup when starting the computer unless you get a Run Setup message.

The Setup program loads configuration values into the battery-backed nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM.

NOTE: If you repeatedly receive Run Setup messages, the battery may be bad/flat. In this case, the system cannot retain configuration values in CMOS.

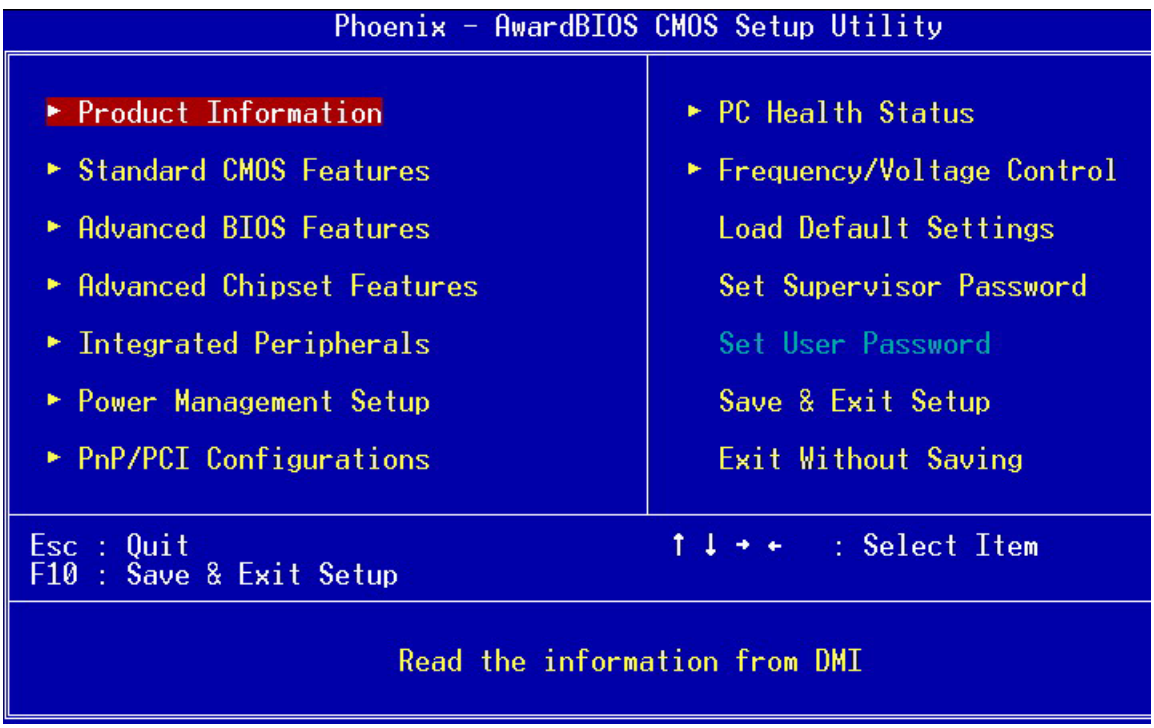
Before you run Setup, make sure that you have saved all open files. The system reboots immediately after you exit Setup.

Entering Setup

Power on the computer and the system will start POST (Power On Self Test)process. When the message of "Press DEL to enter SETUP" appears on the screen, press the key of [Delete] to enter the setup menu.

NOTE: If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On. You may also restart the system by simultaneously pressing [Ctrl+Alt+Delete].

The Setup Utility main menu then appears:



The command line at the bottom of the menu tells you how to move within a screen and from one screen to another.

- To select an option, move the highlight bar by pressing ↑ or ↓ then press ENTER.
- To change a parameter setting, press ← or → until the desired setting is found.
- Press ESC to return to the main menu. If you are already in the main menu, press ESC again to exit Setup.

The parameters on the screens show default values. These values may not be the same as those in your system.

The grayed items on the screens have fixed settings and are not user-configured.

NOTE: Due to the application of a new version of BIOS Setup program, you may find the BIOS menu is largely different from the former models. However, you will soon find out that this version is much more compact than the former ones.

The items in the main menu are explained below:

- ***Product Information***

  To introduce the Product Name,System P/N and MainBoard ID...etc.

- ***Standard CMOS Features***

  The basic system configuration can be set up through this menu.

- ***Standard BIOS Features***

  The advanced system features can be set up through this menu.

- ***Advancted Chipset Features***

  The values for the chipset can be changed through this menu, and the system performance can be optimized.

- ***Integrated Peripherals***

  All onboard peripherals can be set up through this menu.

- ***Power Management Setup***

  All the items of Green function features can be set up throgh this menu.

- ***PnP/PCI Configurations***

  The system's PnP/PCI settings and parameters can be modified through this menu.

- ***PC Health Staus***

  This will display the current status of your PC.

- ***Frequency/Voltage Control***

  Frequency and voltage settings can be loaded through this menu.

- ***Load Default Settings***

  These parameter settings can be loaded through this menu, however, the stable default values may be affected.

- ***Set Supervisor/User Password***

  The supervisor/user password can be set up through this menu.

- ***Save & Exit Setup***

  Save CMOS value settings to CMOS and exit setup.

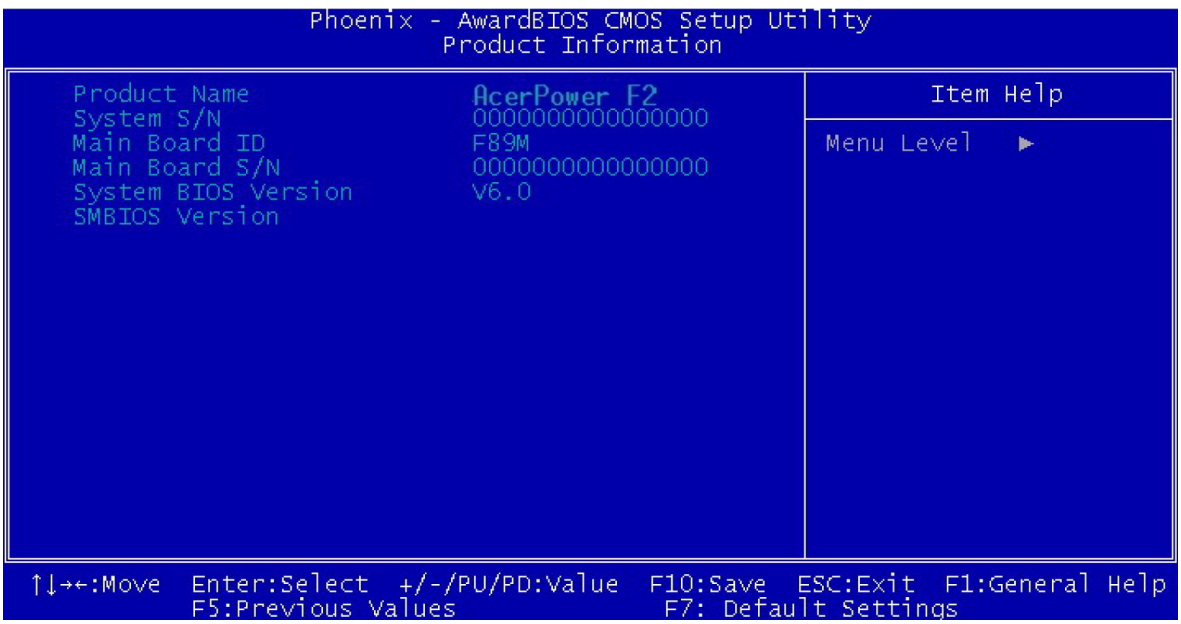
- ***Exit Without Saving***

  Abandon all CMOS value changes and exit setup.

Product Information

The screen below appears if you select Product Information from the main menu:

The Product Information menu contains general data about the system, such as the product name, serial number, BIOS version, etc. These information is necessary for troubleshooting (maybe required when asking for technical support).



The following table describes the parameters found in this menu:

Parameter	Description
Product Name	Displays the model name of your system.
System S/N	Displays your system's serial number.
Main Board ID	Displays the main board's identification number.
Main Board S/N	Displays your main board's serial number.
System BIOS Version	Specifies the version of your BIOS utility.
SMBIOS version	The System Management Interface (SM) BIOS allows you to check your system hardware components without actually opening your system. Hardware checking is done via software during start up. This parameter specifies the version of the SMBIOS utility installed in your system.

Standard CMOS Features

Select Standard CMOS Features from the main menu to configure some basic parameters in your system.

The following screen shows the Standard CMOS Features menu:

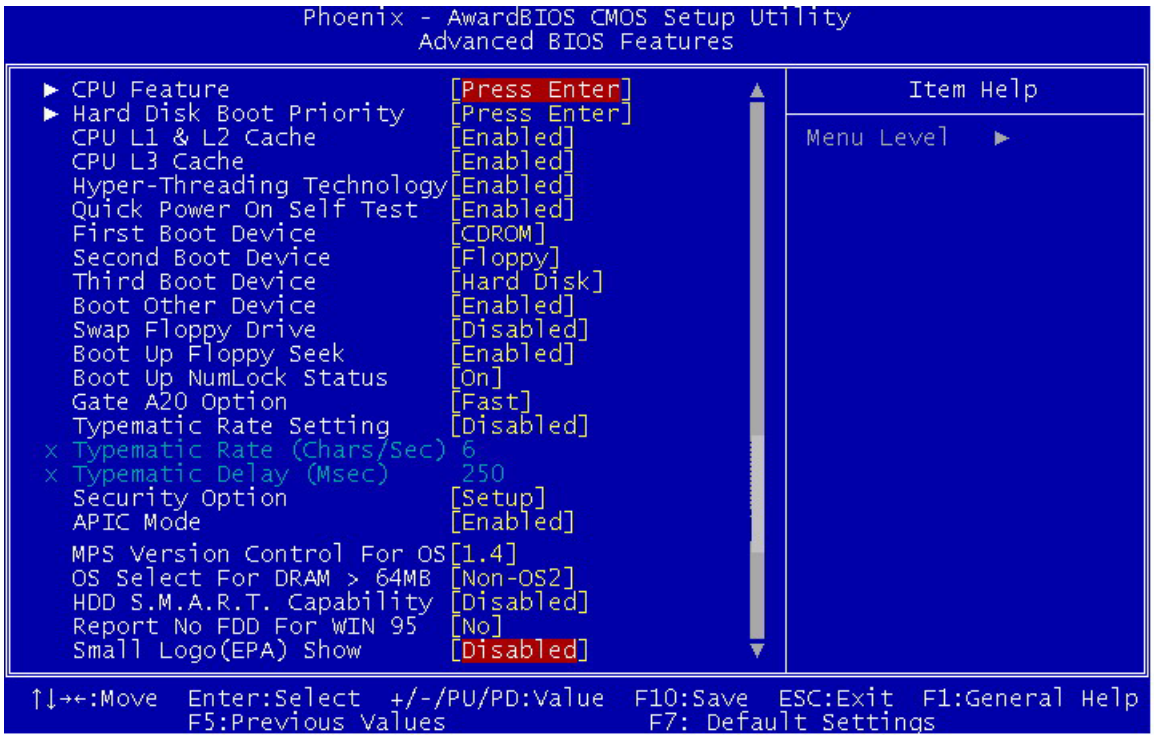
The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
Date	Lets you set the date following the weekday-month-day-year format	Weekday: Sun, Mon...Sat Month: Jan., Feb...Dec. Day: 1 to 31 Year: 1999 to 2098
Time	Lets you set the time following the hour-minute-second format	Hour: 0 to 23 Minute: 0 to 59 Second: 0 to 59
IDE Primary Channel Master	Allows you to configure the hard disk drive connected to the master port of IDE channel. To enter the IDE Primary Master setup, press [Enter]. The IDE CD-ROM is always automatically detected.	IDE Device Model Number: None
IDE Primary Channel Slave	Allows you to configure the hard disk drive connected to the slave port of IDE channel. To enter the IDE Primary Slave setup, press [Enter]. The IDE CD-ROM is always automatically detected.	IDE Device Model Number: None
IDE Secondary Channel Master	Allows you to configure the hard disk drive connected to the master port of IDE channel 1. To enter the IDE Channel 1 Master setup, press [Enter]. The IDE CD-ROM is always automatically detected.	IDE Device Model Number: None

Parameter	Description	Options
IDE Secondary Channel Slav	Allows you to configure the hard disk drive connected to the slave port of IDE channel 2. To enter the IDE Channel Secondary Master setup, press [Enter]. The IDE CD-ROM is always automatically detected.	IDE Device Model Number: None
Drive A	Allows you to configure your floppy drive A.	**1.44 MB, 3.5-inch** None 360 KB, 5.25-inch 1.2 MB, 5.25-inch 720 KB, 3.5-inch 2.88 MB, 3.5-inch
Drive B	Allows you to configure your floppy drive B.	1.44 MB, 3.5-inch **None** 360 KB, 5.25-inch 1.2 MB, 5.25-inch 720 KB, 3.5-inch 2.88 MB, 3.5-inch
Video	This item specifies the type of video card in use. The default setting is VGA/EGA. Since current PCs use VGA only, this function is almost useless and may be disregarded in the future.	**VGA/EGA** CGA40 CGA80 Mono
Halt On	This parameter enables you to control the system stops in case of Power On Self Test errors (POST).	All Errors No Errors **All but Keyboard** All but Diskette All by Disk/Key
Base Memory	Refers to the option of memory that is available to standard DOS programs. DOS systems have an address space od 1MB, but the top 384KB (called high memory) is reserved for system use. This leaves 640 KB of conventional memory. Everything above 1MB is either extended or extended memory.	The BIOS POST will determine the amount of base (or conventional) memory installed in the sytem.
Extended Memory	Memory above and beyond the standard 1MB of base memory that DOS supports. Extended memory is only available in PCs with an Intel 80286 or later microprocessor. Extended memory is not configured in any special manner and is therefore unavailable to most DOS programs. However, MS Windows and OS/2 can use extended memory.	The BIOS determines how much extended memory is present during the POST.
Total Memory	Total based and extended memory, and I/O ROM 384KB available to the system.	total memory of the system.

Advanced BIOS Features

The following screen shows the Advanced BIOS Features:



The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

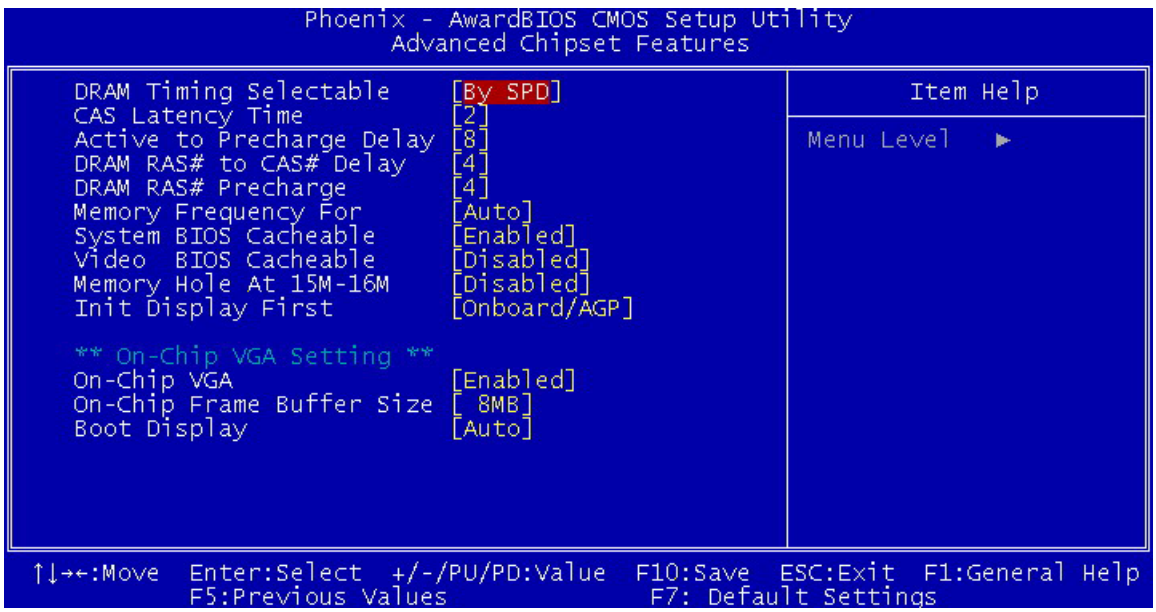
Parameter	Description	Options
CPU Feature	The items allow you to set the Thermal Monitor 1 (on die throttling) and the Thermal Monitor 2 (on ratio & VID transition).	**Press [Enter]**
Hard Disk Boot Priority	This option is used to select the priority for HDD startup. After pressing <Enter> you can select the HDD using the <PageUp>/<PageOn> or Up/Down arrow keys, and change the HDD priority using <+> or <->; you can exit this menu by pressing <Esc>.	**Press [Enter]**
CPU L1 & L2 Cache	Uses internal level 1 (L1) and external level 2 (L2) cache memory to improve performance.	**Enabled** Disabled
Hyper-Threading Technology	This item is only available when CPU and the chipset support Hyper-Threading.	**Enabled** Disabled
Quick Power On Self Test	This parameter speeds up POST by skipping some items that are normally checked.	**Enabled** Disabled
First / Second / Third Boot Device	The items allow you to set the sequence of boot device where BIOS attempts to load the disk operating system.	Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP, LAN, Disabled (Disable this sequence). The sequence following the order of HDD, Floppy and CD-ROM is recommended.

Parameter	Description	Options
Boot Other Device	This parameter allows you to specify the system boot up search sequence.	**Enabled** Disabled
Swap Floppy Drive	Setting to Enabled will swap floppy drive a: and b:.	Enabled **Disabled**
Boot Up Floppy Seek	Setting to Enabled will make BIOS seek floppy drive a: before booting the system.	**Enabled** Disabled
Boot Up NumLock Status	Sets the NumLock status when the system is powered on. Setting to On will turn on the NumLock key when the system is powered on. Setting to Off will allows users to use the arrow keys on the numeric keypad.	**On** Off
Gate A20 Option	This item is to set the Gate A20 status. A20 refers to the first 64KB of extended memory. When the default value Fast is selected, the Gate A20 is controlled by port 92 or chipset specific method resulting in faster system performance. When Normal is selected, A20 is controlled by a keyboard controller or chipset hardware.	**Fast** Normal
Typematic Rate Setting	This item is used to enable or disable the typematic rate setting including Typematic Rate and Typematic Delay.	Enabled **Disabled**
Typematic Rate	After Typematic Rate Setting is enabled, this item allows you to set the rate (characters/ second) at which at keys are accelerated.	Settings: 6,8,10,12,15,20,24 and 30
Typematic Delay	This item allows you to select the delay between when the key was first pressed and when the acceleration begins	Settings: 250, 500, 750 and 1000
Security Option	Specifies the type of BIOS password protection that is implemented. Setup means that the password prompt appears only when end users try to run Setup. System means that a password prompt appears every time when the computer is powered on or when end users try to run Setup.	**Setup** System
APIC Mode	This field is used to enable or disable the APIC (Advanced Programmable Interrupt Controller). Due to compliance with PC2001 design guide, the system is able to run in APIC mode. Enabling APIC mode will expand available IRQ resources from the system.	**Enabled** Disabled
MPS Version Control For OS	This option is used to set up the version of MPS Table used in NT4.0 OS.	**1.4**
OS Select For DRAM > 64MB	This item is only required if you have installed more than 64MB of memory and you are running the OS/2 operating system.	**Non-OS2** OS2
HDD S.M.A.R.T Capability	The S.M.A.R.T (Self-Monitoring, Analysis, and Reporting Technology) system is a diagnostics technology that monitors and predicts device performance.	Enabled **Disabled**
Report No FDD For WIN 95	If you are using the Windows 95 and running a system with on floppy drive,select “Yes” for this item to ensure compatibility with Windows 95 logo certification. The available setting values are: No and Yes	**No** Yes
Small Logo (EPA) Show	This item allows you to enable or disable the EPA logo. The available setting values are : Disabled and Enabled.	Enabled **Disabled**

Advanced Chipset Features

The advanced chipset features setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

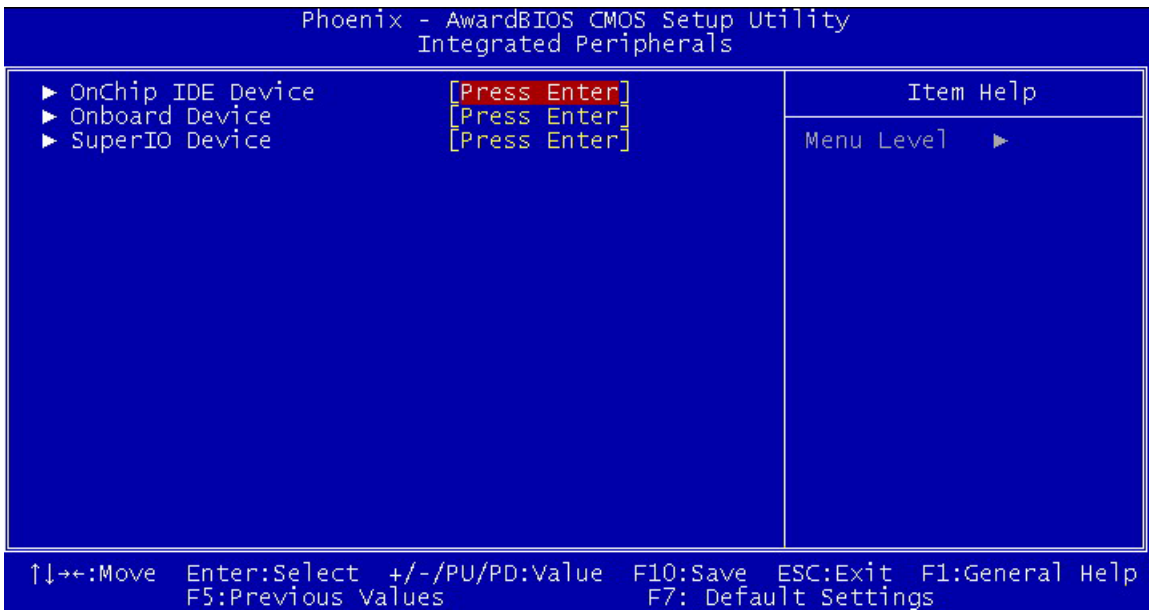
NOTE: Change these settings only if you are familiar with the chipset.



Parameter	Description	Option
DRAM Timing Selectable	This item determines DRAM clock/timing using SPD or manual configuration. The available setting values are: By SPD and Manual.	By SPD
CAS Latency Time	This item determins CAS Latency.	**2** 2.5 3
Active to Precharge Delay	This item allows you to select DRAM Active to Precharge Delay.	**8** 7 6 5
DRAM RAS# to CAS# Delay	This item allows you select a delay time between the CAS and RAS strobe signals.	4 3 2
DRAM RAS# Precharge	This item allows you to select the DRAM RAS# precharge time.	**4** 3 2
Memory Frequency For	This item will control system frequency of memory, you can setup the frequency or let frequency auto setup.	DDR266 DDR333 DDR400 **Auto**
System BIOS Cacheable	This item will allow the System BIOS fleetness memorize function	**Enabled** Disabled

Parameter	Description	Option
Video BIOS Cacheable	Select “Enabled” to allow caching of the Video BIOS which may improve performance. If any other program writes to this memory area, a system error may result.	Enabled **Disabled**
Memory Hole At 15M-16M	You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. The user information of peripherals that need to use this area of system memory usually discuss their memory requirements.	Enabled **Disabled**
Init Display First	This item is used to set which display device will be used	PCI Slot **Onboard/AGP**
On-chip VGA Setting		
On-Chip VGA	This item is used to enable/disable the Onboard VGA.	**Enabled** Disabled
On-Chip Frame Buffer Size	This item is used to set the VGA frame buffer size. **NOTE:** This function doesn’t work when the external display card is used.	1MB **8MB** 16MB
Boot Display	This item is used to select the display mode used when your PC starts up.	**Auto** CRT EFP TV

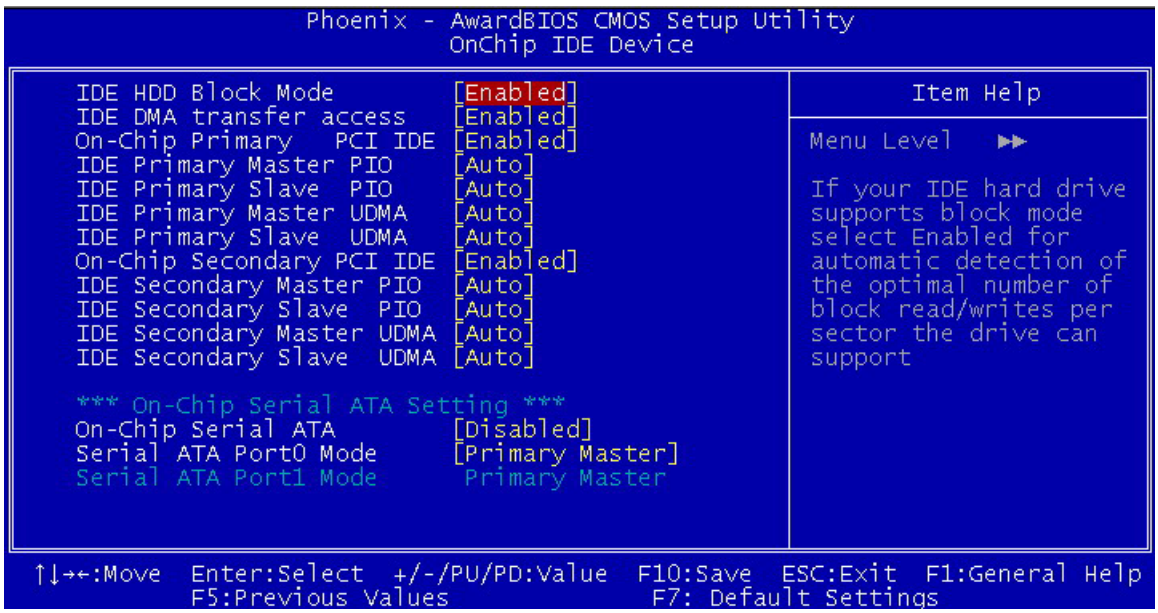
Integrated Peripherals



Parameter	Description	Option
OnChip IDE Device	Use the arrow keys to select your options; press <Enter> key to enter the setup sub-menu. The options and setting methods are discussed below.	**Press Enter**
Onboard Device		**Press Enter**
SuperIO Device		**Press Enter**

OnChip IDE Device

Press [Enter] to enter the sub-menu and the following screen appears:



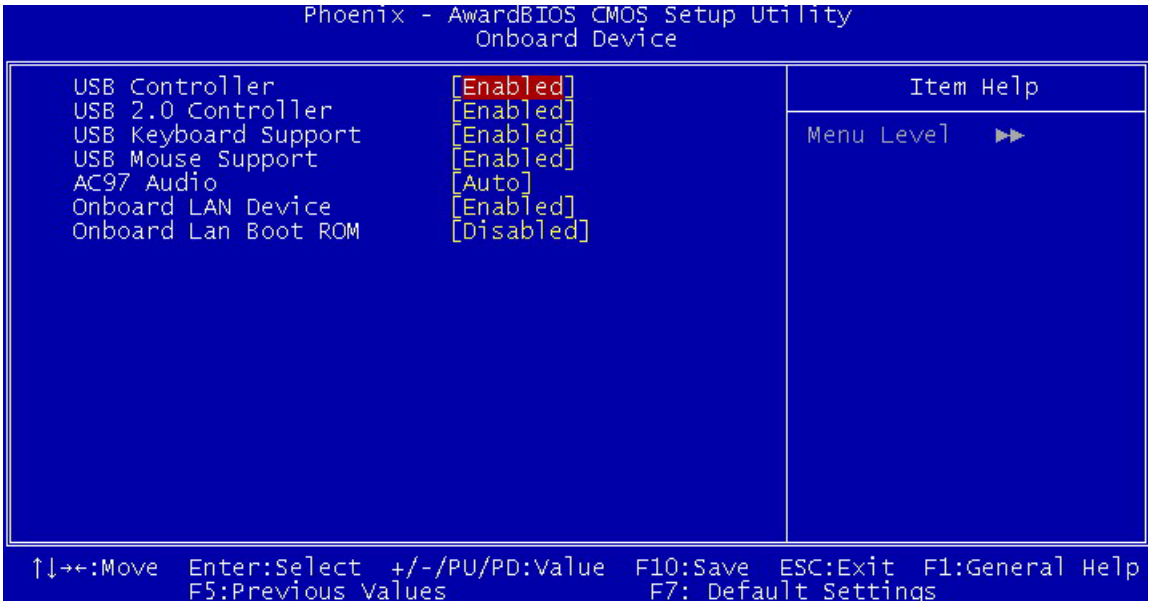
OnChip IDE Device

Parameter	Description	Option
IDE HDD Block Mode	Block mode is also called block transfer, multiple compounds or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select “Enabled” for automatic detection of the optimal number of block read/write per sector the drive can support.	**Enabled** Disabled
IDE DMA transfer access	This option is used to set up the IDE transfer access -- with it set to Enabled, the IDE Transfer Access uses the DMA mode; with it set to Disabled, the IDE Transfer Access uses the PIO mode.	**Enabled** Disabled
On-Chip Primary PCI IDE	Setting the option as Enabled will allow you to set the sub-menu function settings.	**Enabled** Disabled
IDE Primary Master PIO IDE Primary Slave PIO IDE Primary Master UDMA IDE Primary Slave UDMA	Setting these items to “Auto” activates the HDD speed auto-detect function. The PIO mode specifies the data transfer rate of the HDD. For example, mode 0 data transfer rate is 3.3MB/s, mode 1 is 5.2 MB/s, mode 2 is 8.3MB/s, mode 3 is 11.1 MB/s and mode 4 is 16.6MB/s. If your hard disk performance becomes unstable, you may manually try the slower mode. These items allow you to set the Ultra DMA 33/66/100 mode supported by the hard disk drive connected to your primary and secondary IDE connectors.	**Auto** Mode 0 Mode 1 Mode 2 Mode 3 Mode 4
On-Chip Secondary PCI IDE	Setting the option as Enabled will allow you to set the sub-menu function settings.	**Enabled** Disabled

OnChip IDE Device

Parameter	Description	Option
IDE Secondary Master PIO IDE Secondary Slave PIO IDE Secondary Master UDMA IDE Secondary Slave UDMA	Setting these items to “Auto” activates the HDD speed auto-detect function. The PIO mode specifies the data transfer rate of the HDD. For example, mode 0 data transfer rate is 3.3MB/s, mode 1 is 5.2 MB/s, mode 2 is 8.3MB/s, mode 3 is 11.1 MB/s and mode 4 is 16.6MB/s. If your hard disk performance becomes unstable, you may manually try the slower mode. These items allow you to set the Ultra DMA 33/66/100 mode supported by the hard disk drive connected to your primary and secondary IDE connectors.	**Auto** Mode 0 Mode 1 Mode 2 Mode 3 Mode 4
On-Chip Serial ATA Setting		
On-Chip Serial ATA	This option is used to set the On-chip Serial ATA function. When it is set to Disabled, the function will be disabled; when it is set to Auto, the BIOS will enable the function automatically; with it set to Combined Mode, four HDDs at most will be supported; with it set to Enhanced Mode, six HDDs at most will be supported (for those under Windows 2000 and Windows XP only); with it set to S-ATA only, only the S-ATA HDD can be used.	**Disabled** Auto Combined Mode Enhanced Mode SATA Only
Serial ATA Port 0/1 Mode	This option is used to set the Serial ATA Port 0/1 Mode -- with it set to Primary Master/Slave, the Primary IDE cannot be used, supporting the IDE/SATA boot; with it set at Secondary Master/Slave, the Secondary IDE is inapplicable, supporting the IDE/SATA boot; with it set at Primary / Secondary Master, the SATA HDD can act as the primary or secondary drive in such case when the SATA only is selected; with it set at SATA 0/1 Master, it is used to select the SATA HDD port when the SATA Enhanced Mode is selected.	**Primary Master** Primary Slave Secondary Master Secondary Slave Primary Master Secondary Master SATA0 master SATA1 master
Serial ATA Port1 Mode	This option is used to set the Serial ATA Port 0/1 Mode -- with it set to Primary Master/Slave, the Primary IDE cannot be used, supporting the IDE/SATA boot; with it set at Secondary Master/Slave, the Secondary IDE is inapplicable, supporting the IDE/SATA boot; with it set at Primary / Secondary Master, the SATA HDD can act as the primary or secondary drive in such case when the SATA only is selected; with it set at SATA 0/1 Master, it is used to select the SATA HDD port when the SATA Enhanced Mode is selected.	**Primary Slave**

Onboard Device

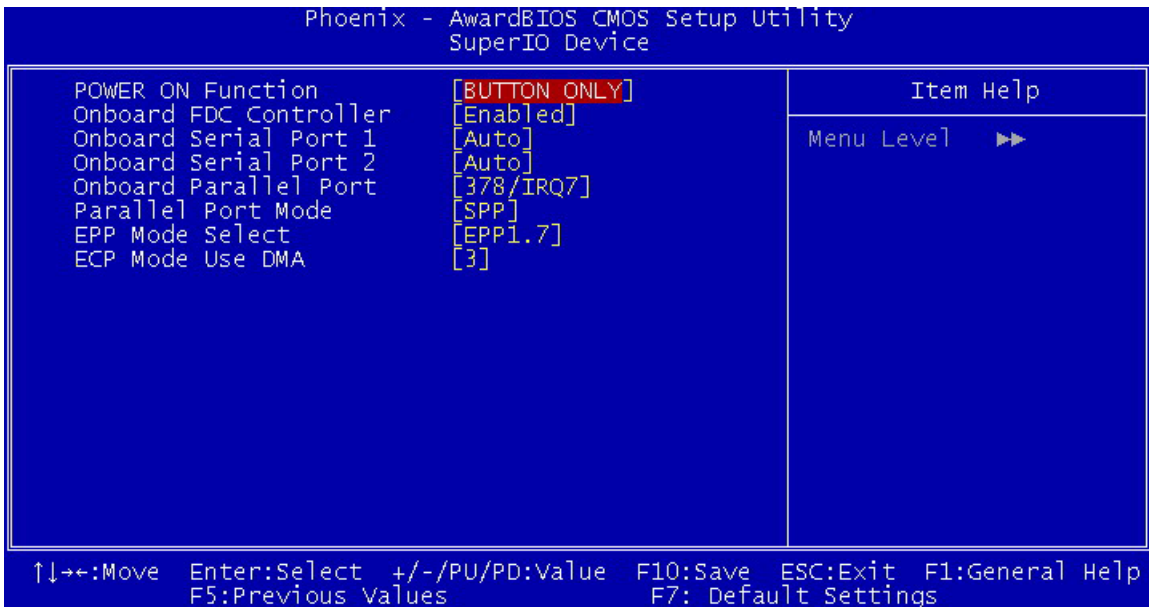


Press [Enter] to enter the sub-menu and the following screen appears:

Onboard Device

Parameter	Description	Option
USB Controller	This item is used to enable or disable the on-chip USB.	**Enabled** Disabled
USB 2.0 Controller	Enable this item if the system supports USB 2.0.	**Enabled** Disabled
USB Keyboard Support	This item lets you enable or disable the USB keyboard driver within the onboard BIOS. The keyboard driver simulates legacy keyboard command and lets you use a USB keyboard during POST or after boot if you do not have a USB driver in the operating system.	**Enabled** Disabled
USB Mouse Support	This item lets you enable or disable the USB mouse driver within the onboard BIOS. The keyboard driver simulates legacy mouse command and lets you use a USB mouse during POST or after boot if you do not have a USB driver in the operating system.	**Enabled** Disabled
AC97 Auto	Enabling the on-die AC97 Auto if no add-on PCI audio device.	**Auto** Disabled
Onboard LAN Device	To enable or disable the onboard LAN controller	**Enabled** Disabled
Onboard LAN Boot ROM	This setting determines whether or not to activate the boot ROM of the onboard LAN chip.	Enabled **Disabled**

Super IO Device



Press [Enter] to enter the sub-menu and the following screen appears:

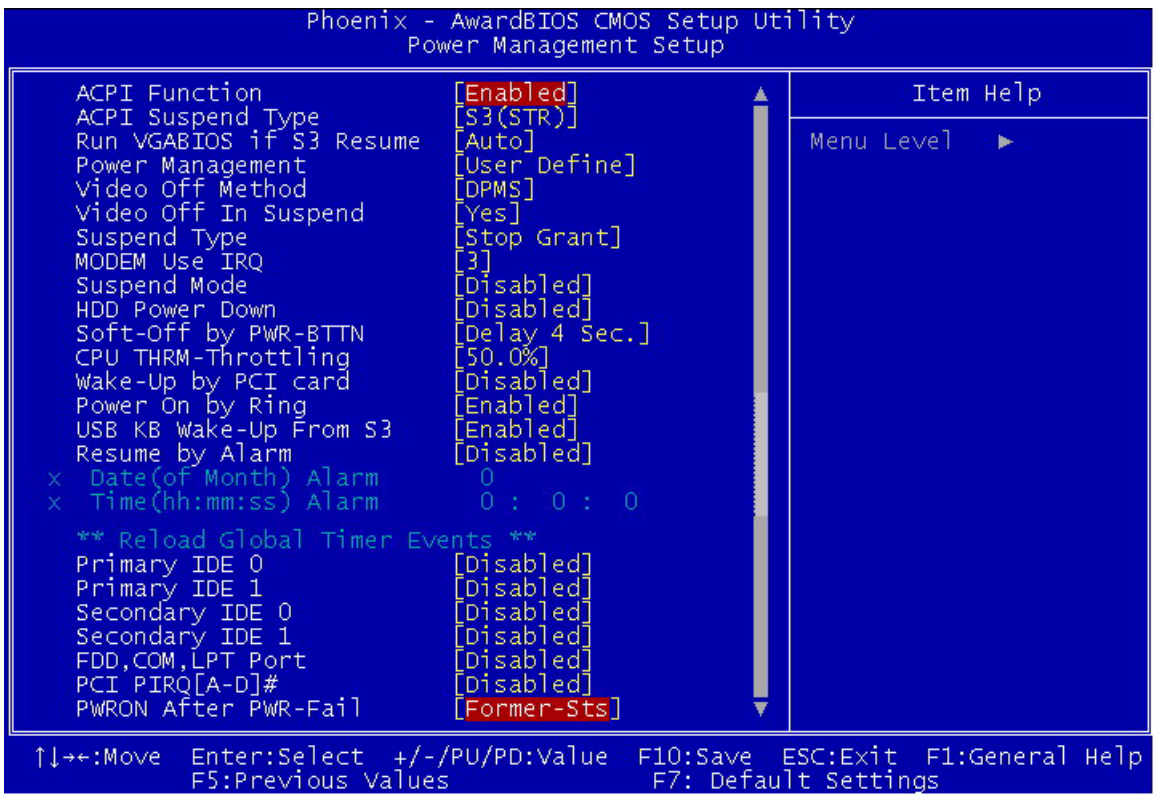
Soupier Device

Parameter	Description	Option
POWER ON Function	This option is used to set the power on method for your PC.	Any Key **Button Only**
Onboard FDC Controller	Enables or disables the onboard floppy disk drive controller.	**Enabled** Disabled
Onboard Serial Port 1 Onboard Serial Port 2	This option is used to assign the I/O address and interrupt request (IRQ) for onboard serial port 1 and port 2 (COM1,COM2).	Disabled 3F8/IRQ4 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3 **Auto**
Onboard Parallel Port	This option is used to assign the I/O address and interrupt request (IRQ) for the onboard parallel port.	Disabled **378/IRQ7** 278/IRQ5 3BC/IRQ7
Parallel Port Mode	Enables you to set the data transfer protocol for your parallel port. SPP (Standard Parallel Port), EPP (Enhanced Parallel Port), ECP (Extended Capabilities Port) and ECP+EPP.	**SPP** EPP ECP ECP+EPP Normal
EPP Mode Select	Select a DMA Channel for the parallel port when using the ECP mode. This field is only configurable if Parallel Port Mode is set to ECP.	EPP1.9 **EPP1.7**
ECP Mode Use DMA	When the onboard parallel port is set to ECP mode, the parallel port can use DMA 3 or DMA 1.	1 **3**

Power Management Setup

The Power Management menu lets you configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

The following screen shows the Power Management parameters and their default settings:



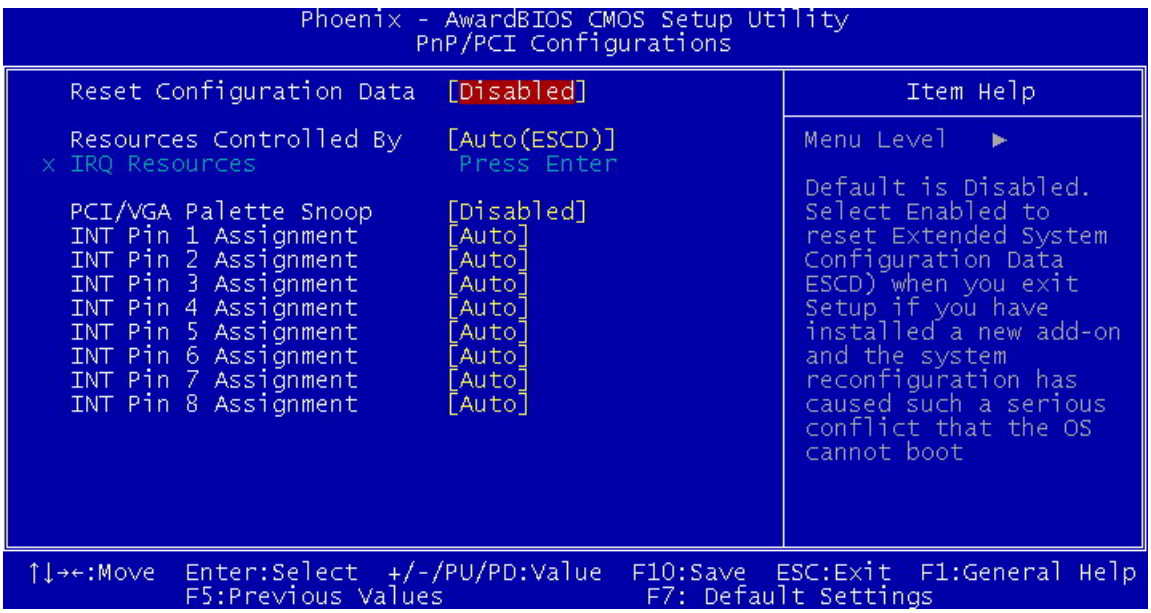
The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
ACPI Function	This item is to activate the ACPI (Advanced Configuration and Power Management Interface) Function. If your operating system is ACPI aware, such as Windows 98SE/2000/Me, select Enabled.	**Enabled** Disabled
ACPI Suspend Type	This item specifies the power saving modes for ACPI function. S1(POS): The S1 sleep mode is a low power state. In this state, no system context (CPU or chipset) is lost and hardware maintains all system context. S3 (STR): The S3 sleep mode is s power-down state in which power is supplied only to essential components such as main memory and wake-capable devices and all system context is saved to main memory. The information stored in memory will be used to restore the PC to the previous state when an *wake-up* event occurs. S1&S3: Both S1 and S3 will be adopted.	**S1 (POS)** S3 (STR) S1&S3

Parameter	Description	Options
Run VGABIOS if S3 Resume	This option allows the system to initalize the VGABIOS from S3 (Suspend to RAM) sleep state.	**Auto** Yes No
Power Management	This option is used to set the power management scheme.	**User Define** Min. Saving Max Saving
Video Off Method	This item determines the manner in which the monitor is blanked. V/H SYNC+Blank: This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer. Blank Screen: This option only write blanks to the video buffer. DPMS Supported: Initial display power management signaling.	Blank Screen V/H SYNC+Blank **DPMS**
Video Off In Suspend	This option is used to define the video off method. “Blank Screen” mode means that after the computer enters power saving mode, only the monitor will close, however, the vertical and horizontal scanning movement of the screen continues. When you select the V/H Sync+Blank” mode the vertical and horizontal scanning movement of screen stops when the computer enters power saving mode. “DPMS” mode is a new screen power management system, and it needs to be supported by the monitor your are using.	No **Yes**
Suspend Type	This option is used to set the idle time before the system enters into sleep status.	**Stop Grant** PwrOn Suspend
Mode Use IRQ	This setting names the interrupt request (IRQ) line assigned to the modem (if any) on your system. Activity of selected IRQ always awakens the system.	NA,3,4,5,7,9,10,11
Suspend Mode	The CPU clock will be stopped and the video signal will be suspended if no Power Management events occur for a specified length of time. Full power function will return when a Power Management event is detected.	**Stop Grant** PwrOn Suspend
HDD Power Down	This option is used to turn off hard disk power if the hard disk is idle for a given period of time.	Disabled 1~15 Min.
Soft-Off by PWR-BTTN	This option is used to set the power down method. This function is only valid for systems using an ATX power supply. When “Instand Off” is selected, press the power switch to immediately turn off power. When “Delay 4 Sec” is selected, press and hold the power button for four seconds to turn off power.	Instant-Off: The power button functions as a normal power-on/-off button. **Delay 4 Sec.:** When you press the power button, the computer enters the suspend/ sleep mode, but if the button is pressed for more than four seconds, the computer will be turned off.
CPU THRM-Throttling	This option is used to specify the CPU speed (at percentage) to slow down the CPU when it reaches the predetermined overheat temperature.	75.0% **50.0%** 25.0%
Wake-Up by PCI Card	This item specifies whether the system will be awakened from power saving modes when activity or input signal of the specified hardware peripheral or component is detected.	Enabled **Disabled**

Parameter	Description	Options
Power On by Ring	An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state.	**Enabled** Disabled
USB KB Wake-Up From S3	This option allows you to specify whether the system will be awakened from power saving modes when activity or input signal of the specified hardware peripheral or component is detected.	**Enabled** Disabled
Resume by Alarm	When set to Enabled, the following three fields become available: Month Alarm, Day of Month Alarm, and Time Alarm Upon arrival of the alarm time, it will instruct the system to wake up.	Enabled **Disabled**
Reload Global Timer Events		
Primary IDE 0 Primary IDE 1 Secondary IDE 0 Secondary IDE 1	When this item is enabled, the system power will resume the system from a power saving mode if there is any activity on primary or secondary IDE channels 0 or 1.	Enabled **Disabled**
FDD,COM,LPT Port	When this item is enabled, the system will restart the power-saving time-out counters when any activity is detected on the floppy disk drive, serial ports, or the parallel port.	Enabled **Disabled**
PCI PIRQ [A-D]#	When this item is enabled, any activity from one of the listed devices wakes up the system.	Enabled **Disabled**
PWRON After PWR-Fail	This item specifies when your system reboot after a power failure or interrupt occurs.	Off On **Former-Sts**

PnP/PCI Configuration

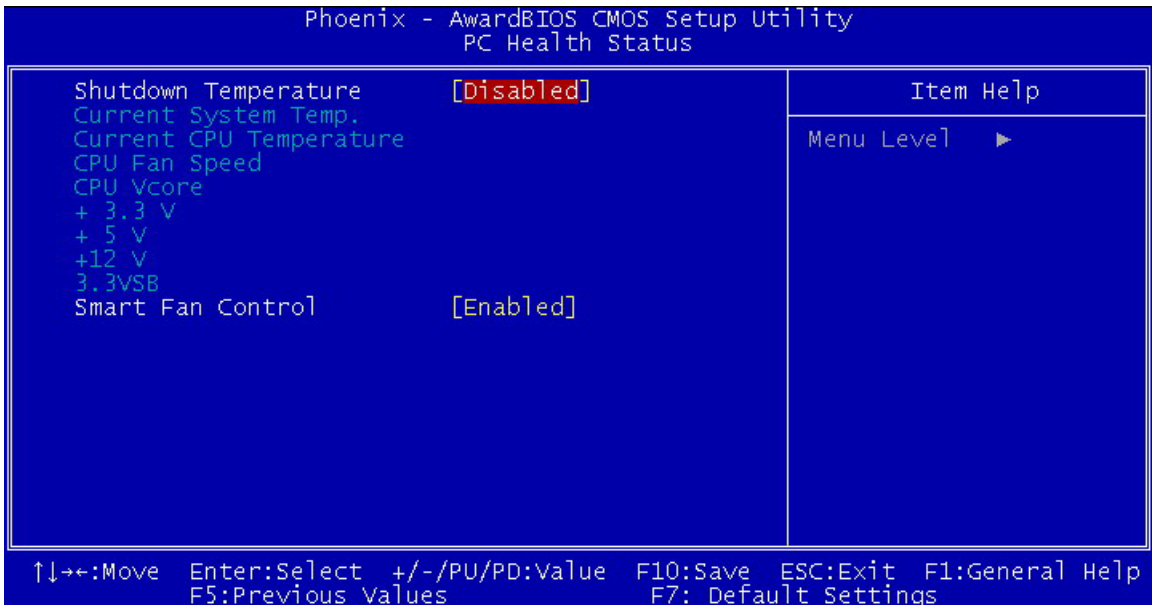


The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
Reset Configuration Data	Selecting “Enabled” to reset Extended System Configuration Data (ESCD) only if you installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot. Otherwise, you should leave it unchanged.	**Disabled** Enabled
Resources Controlled By	This BIOS can automatically configure all of the boot and Plug and Play compatible devices. You can also set it as Manual and go into each of the sub menu to choose specific resources.	**Auto (ESCD)** Manual
IRQ Resources	The items are adjustable only when “Resources Controlled By” is set to Manual. By pressing “Enter” to access the sub menu.	**Press Enter**
PCI/VGA Palette Snoop	Disabled - Data read or written by the CPU is only directed to the PCI VGA device’s palette registers. Enabled - Data read or written by the CPU is directed to both the PCI VGA device’s palette registers and the ISA VGA device’s palette registers, permitting the palette registers of both VGA devices to be identical.	**Disabled** Enabled *If any ISA bus adapter in the system requires VGA Palette snooping, the setting must be set to “Enabled”.

NOTE: It is strongly recommended that only experienced users should make any changes to the default settings.

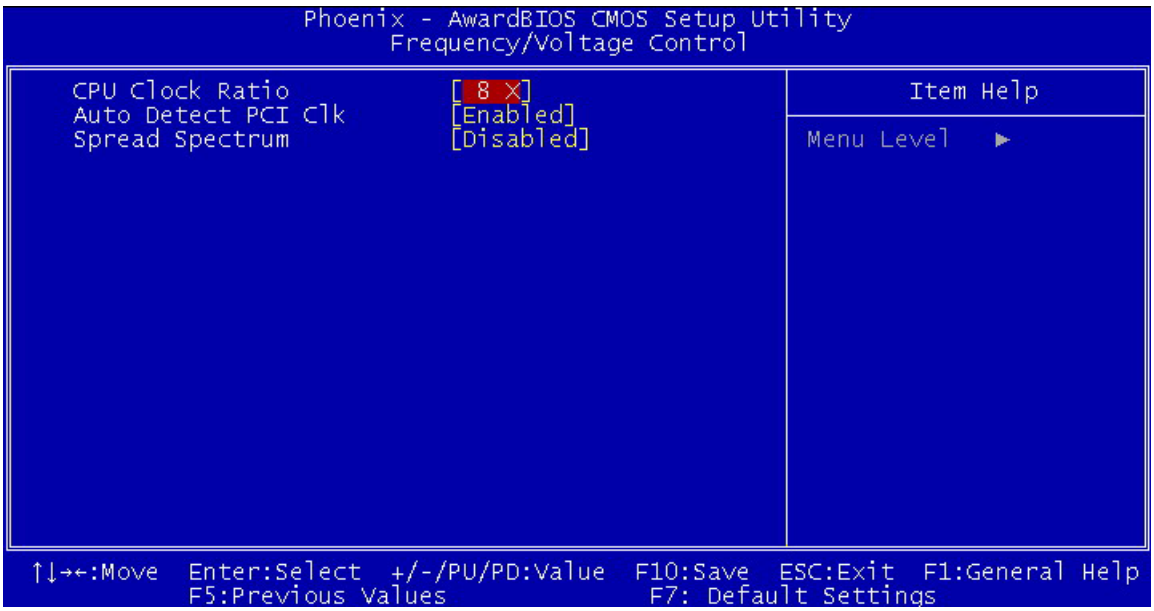
PC Health Status



The following table describes the parameters found in this menu:

Parameter	Description	Options
Shutdown Temperature	This option is for setting the shutdown temperature level for the processor. When the processor reaches the temperature you set, the ACPI-aware system will be shut down.	**Disabled** 95° C/203° F 100° C/212° F 105° C/221° F 110° C/230° F
Current System/CPU Temperature, CPU/ Vcore	These items display the current status of all of the mainboard hardware devices/ components such as CPU voltages, temperatures and all fans' speeds.	
Smart Fan Control	This option is setting the smart Fan temperature level.	**Enabled** Disabled

Frequency/Voltage Control

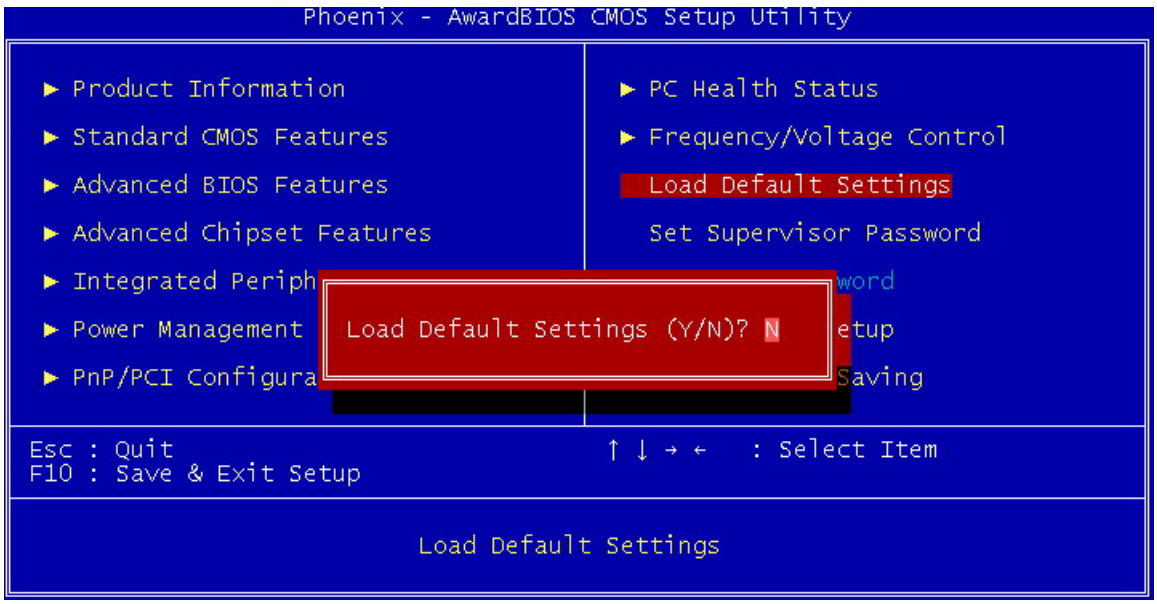


The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
CPU Clock Ratio	If the CPU Ratio is set to Manual, end users can choose a suitable ratio to support the CPU.	8x to 50x
Auto Detect PCI Clk	This option allows you to enable/disable the feature of auto detecting the clock frequency of the installed PCI bus.	**Enabled** Disabled
Spread Spectrum	When the motherboard's clock generator pulses, the extreme values (spikes) of the pulses creates EMI (Electromagnetic Interference). The spread Spectrum function reduces the EMI generated by modulating the pulses so that the spikes of the pulses are reduced to flatter curves. If you do not have any EMI problem, leave the setting at Disabled for optimal system stability and performance. But if you are plagued by EMI, setting to Enabled for EMI reduction. Remember to disable Spread Spectrum if you are overlocking because even a slight jitter can introduce a temporary boost in clockspeed which may just cause your overlock ed processor to lock up.	**Disabled** 0.35% 0.50% 0.75% 1.00%

Load Default Settings

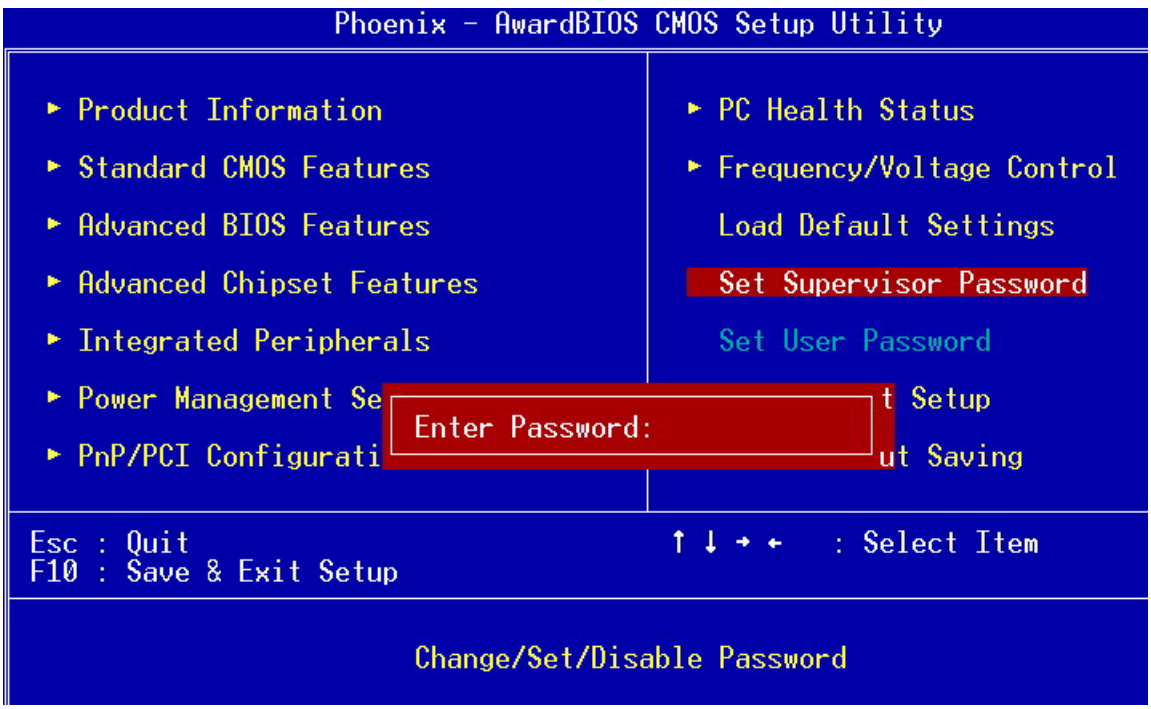
This option opens a dialog box that lets you install defaults for all appropriate items in the Setup Utility.



Press <Y> and then <Enter> to install the defaults. Press <N> and then <Enter> to not install the defaults. The defaults place demands on the system that may be greater than the performance level of the components, such as the CPU and the memory. You can cause fatal errors or instability if you install the optimized defaults when your hardware does not support them. If you only want to install setup defaults for a specific option, select and display that option.

Set Supervisor/User Password

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.



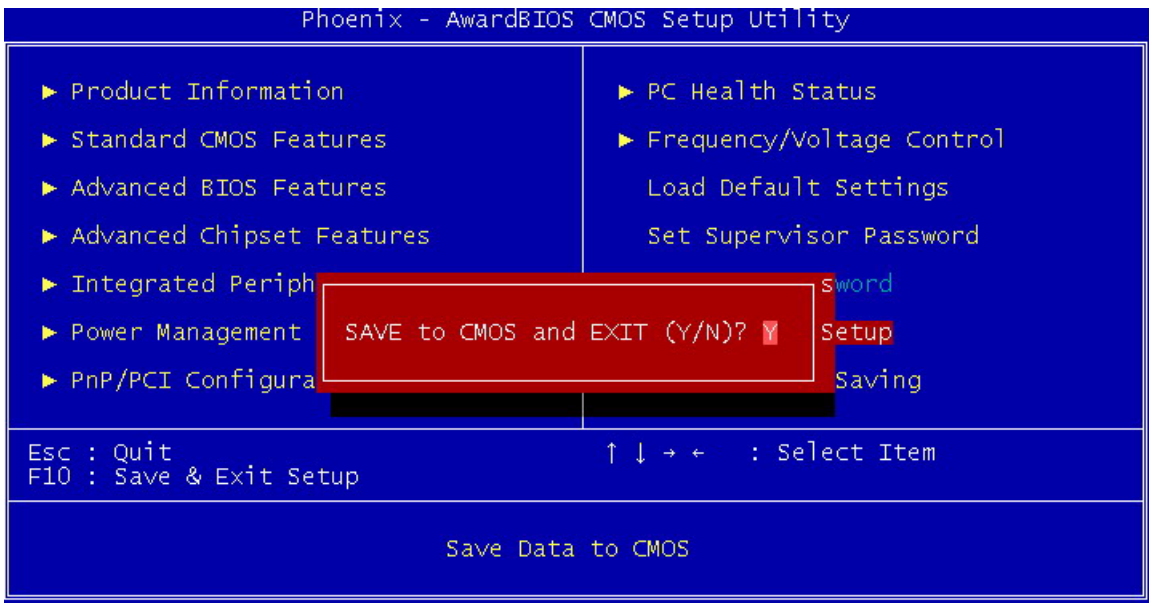
Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

Save & Exit Setup

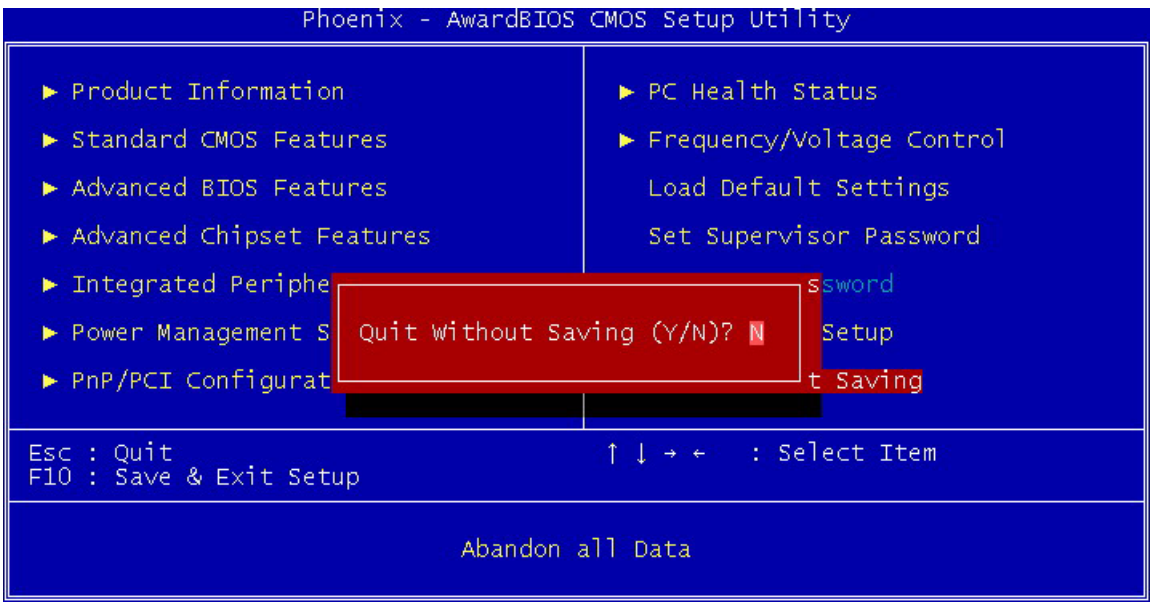
Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility.



When the Save and Exit dialog box appears, press <Y> to save and exit, or press <N> to return to the main menu.

Exit Without Saving

Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility.



When the Exit Without Saving dialog box appears, press <Y> to discard changes and exit, or press <N> to return to the main menu.

NOTE: If you have made settings that you do not want to save, use the "Exit Without Saving" item and press <Y> to discard any changes you have made.

Machine Disassembly and Replacement

Please also refer to the AcerPower SV Service CD for the assembly/disassembly procedure.

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge.
- Wire cutter.
- Phillips screwdriver (may require different size).

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting back the components.

NOTE: The AcerPower F2 mechanical housing is similar with AcerPower SV.

General Information

Before You Begin

Before proceeding with the disassenbly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.

Standard Disassembly Procedure

This section tells you how to disassemble the system when you need to perform system service. Please also refer to the disassembly video, if available.

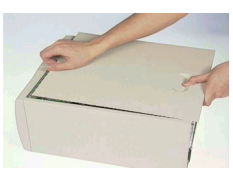
CAUTION: Before you proceed, make sure you have turned off the system and all peripherals connected to it.

Opening the System

1. Place the system unit on a flat, steady surface.

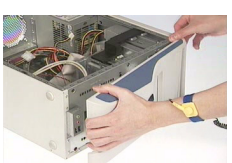
2. Turn the housing back, and remove the screws as shown here.

3. Slide the side door out. Then remove it.



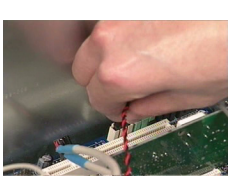
Removing the Front Panel

1. Release the six latches behind the front bezel.
2. Remove the bezel by following the instruction below.

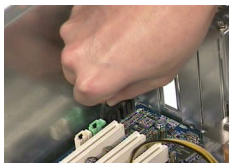


Removing the Cables

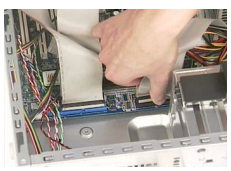
1. Disconnect the Aux-In cable.



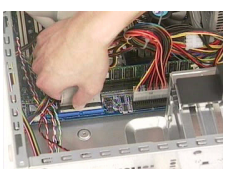
2. Disconnect the CD-In cable.

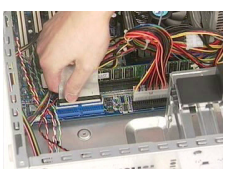


3. Disconnect the floppy cable.



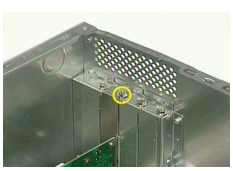
4. Disconnect the IDE1 and IDE2 cable.

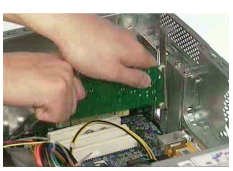




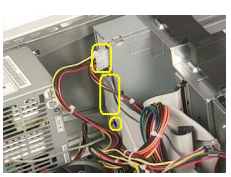
Removing the Modem card, CD-ROM, Floppy and HDD

1. Detach the modem card.

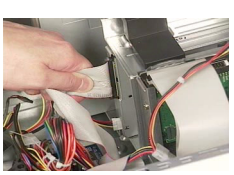




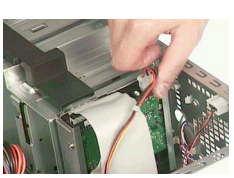
2. Disconnect the CD-ROM power, IDE and CD-In cables.

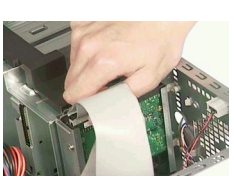


3. Disconnect the floppy cable and power cable.

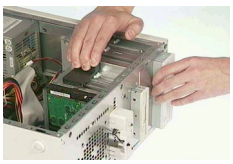


4. Disconnect the HDD power cable and IDE cable.

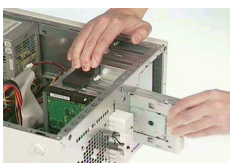




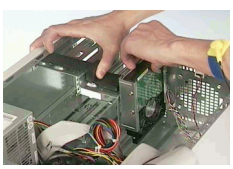
5. Press the latch and remove the CD-ROM drive.



6. Press the latch and remove the floppy drive.



7. Press the latch again to release the hard disk module.

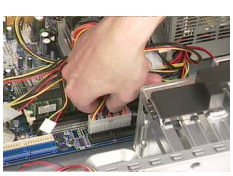


8. Detach the HDD from the bracket.

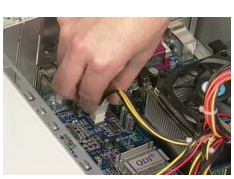


Removing the Power Supply

1. Remove the main ATX power connector as shown here.



2. Remove the Pentium 4(ATX-12V) power connector as shown here.

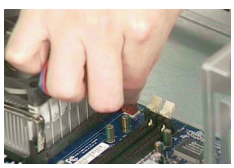


3. Remove the four screws as shown here.

4. Remove the power supply.

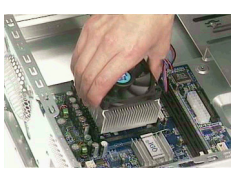
Removing the Heatsink and the CPU

1. Disconnect the Pentium 4 CPU power cable.

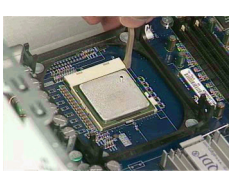


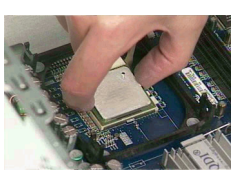
2. Release the two heatsink latches.

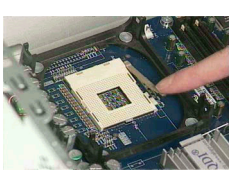
3. Remove the heatsink module.



4. Remove the CPU by following the instructions here.

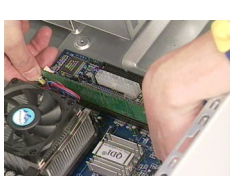


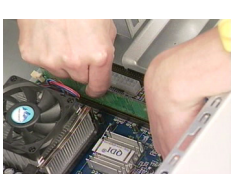




Removing the Memory

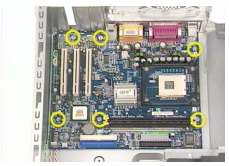
1. Pop out the memory and remove it as shown here.



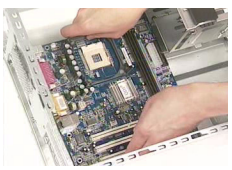


Removing the Mainboard

1. Remove the six screw as shown here.

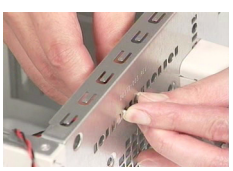


2. Remove the motherboard as shown here.



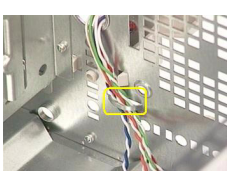
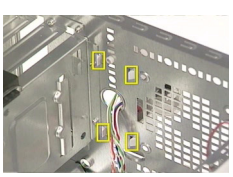
Removing the Power Button

1. Remove the power button as shown here.



Removing the LED Module

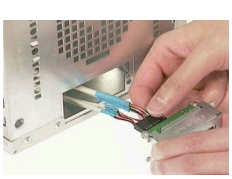
1. Remove the LED module by following the instructions here.


Removing the Daughter Board

1. Remove the screw as shown here.

2. Detach the USB cable and audio cable from the daughter board.

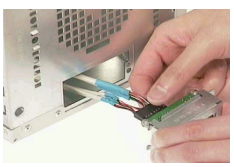



Standard Reassembly Procedure

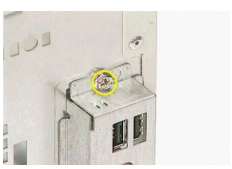
This section tells you how to reassemble the system when you need to perform system service. Please also refer to the assembly video, if available.

Installing the Daughter Board

1. Connect the audio cable and USB cables to the daughter board.

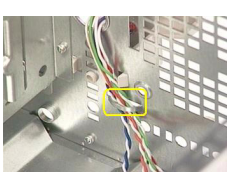
2. Fasten the daughter board with one screw as shown here.



Installing the LED Module

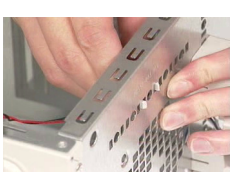
1. Install the LED module by following the instructions here.





Installing the Power Button

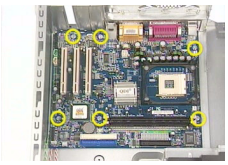
1. Attach the power button as shown here.



Installing the Mainboard

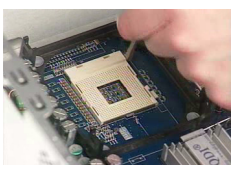
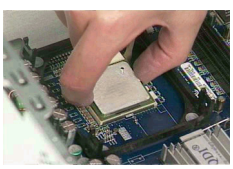
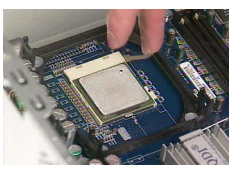
1. Put the motherboard to the original position as shown here.

2. Secure the motherboard with the six screw as shown here.

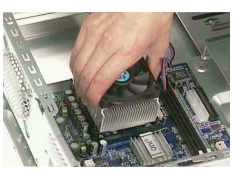


Installing the Heatsink and the CPU

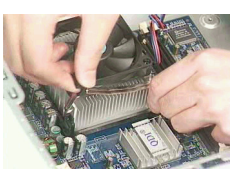
1. Place the CPU to the CPU socket by following the instructions here.

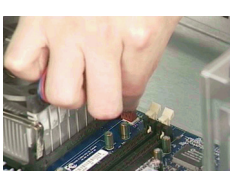
2. Place the heatsink module.



3. Secure the heatsink with the two heatsink latches.

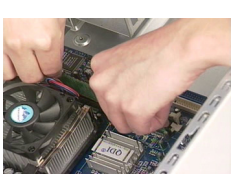


4. Connect the Pentium 4 CPU power cable.



Installing the Memory

1. Insert the memory to the DIMM slot as shown here.

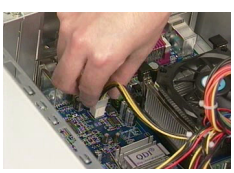


Installing the Power Supply

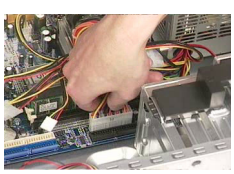
1. Place the power supply to the original position as shown here.

2. Secure the power supply with the four screws as shown here.

3. Connect the Pentium 4(ATX-12V) power connector to the motherboard as shown here.



4. Connect the main ATX power connector to the motherboard as shown here.



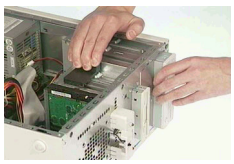
Installing the Modem card, CD-ROM, Floppy and HDD

1. Insert the HDD to the bracket by following the instructions here.

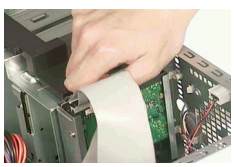
2. Place the HDD module back to the original position.

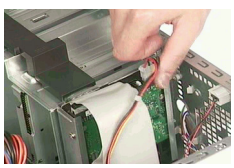
3. Place the floppy drive back to the original position.

4. Place the CD-ROM drive back to the original position.

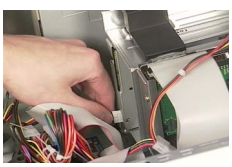


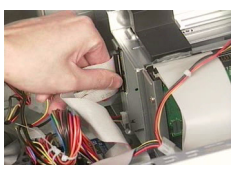
5. Connect the HDD power cable and IDE cable.



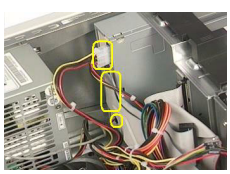


6. Connect the floppy cable and power cable.

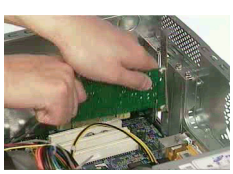


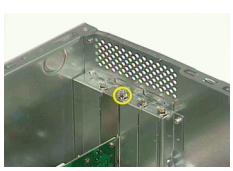


7. Connect the CD-ROM power, IDE and CD-In cables.



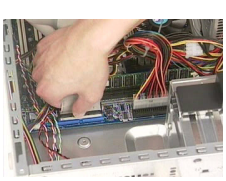
8. Place the modem card back to one PCI slot. Then secure the modem card with the screw.

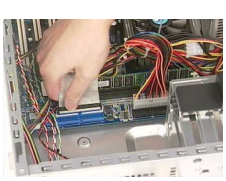




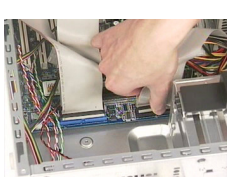
Installing the Cables

1. Connect the IDE1 and IDE2 cable to the motherboard.

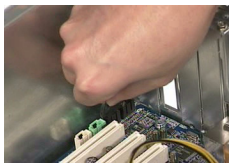




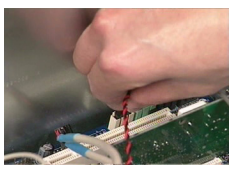
2. Connect the floppy cable to the motherboard.



3. Connect the CD-In cable to the motherboard.



4. Connect the Aux-In cable to the motherboard.



Installing the Front Panel

1. Place the front bezel back to the original position.

Closing the System

1. Place the side door back to the original position.

2. Secure the side door with the two screws as shown here.

Troubleshooting

This chapter provides troubleshooting information for the AcerPower F2:

- Power-On Self-Test (POST)
- Index of Error Messages
- Index of Error Codes and Error Beeps
- Index of Error Symptoms
- Undetermined Problems

Power-On Self-Test (POST)

Each time you turn on the system, the Power-on Self Test (POST) is initiated. Several items are tested during POST, but is for the most part transparent to the user.

The Power-On Self Test (POST) is a BIOS procedure that boots the system, initializes and diagnoses the system components, and controls the operation of the power-on password option. If POST discovers errors in system operations at power-on, it displays error messages on screen, generates a check point code at port 80h or even halts the system if the error is fatal.

The main components on the main board that must be diagnosed and/or initialized by POST to ensure system functionality are as follows:

- Microprocessor with built-in numeric co-processor and cache memory subsystem
- Direct Memory Access (DMA) controller
- Interrupt system
- Three programmable timers
- ROM subsystem
- RAM subsystem
- RTC RAM subsystem and real time clock/calendar with battery backup
- Onboard serial interface controller
- Onboard parallel interface controller
- Embedded hard disk interface and one diskette drive interface
- Keyboard and auxiliary device controllers
- I/O ports
  - PS/2-compatible mouse port
  - PS/2-compatible keyboard port
- Serial ports
- Parallel ports
- USB port

POST Check Points

When POST executes a task, it uses a series of preset numbers called check point to be latched at port 80h, indicating the stages it is currently running. This latch can be read and shown on a debug board.

The following table describes the Acer common tasks carried out by POST. A unique check point number represents each task.

Checkpoint	Description
CFh	Test CMOS R/W functionality
C0h	Early chipset initialization: • Disable shadow RAM • Disable L2 Cache (socket 7 or below) • Program basic chipset registers
C1h	Detect memory • Auto-detection of DRAM size, type and ECC. • Auto-detection of L2 cache (socket 7 or below)
C3h	Expand compressed BIOS code to DRAM
C5h	Call chipset hook to copy BIOS back to E000 & F000 shadow RAM
0h1	Expand the Xgroup codes locating in physical address 1000:0
02h	Reserved
03h	Initial Superio_Early_Init switch
04h	Reserved
05h	1. Blank out screen 2. Clear CMOS error flag
06h	Reserved
07h	1. Clear 8042 interface 2. Initialize 8042 self-test
08h	1. Test special keyboard controller for Winbond 977 series Super I/O chips 2. Enable keyboard interface
09h	Reserved
0Ah	1. Disable PS/2 mouse interface (optional) 2. Auto detect ports for keyboard & mouse followed by a port & interface swap (optional) 3. Reset keyboard for Winbond 977 series Super I/O chips
0Bh	Reserved
0Ch	Reserved
0Dh	Reserved
0Eh	Test F000h segment shadow to see whether it is R/W-able or not. If test fails. keep beeping the speaker.
0Fh	Reserved
10h	Auto detect flash type to load appropriate flash R/W codes into the run time area in F000 for ESCD & DMI support.
11h	Reserved
12h	Use walking 1's algorithm to check out interface in CMOS circuitry. Also set real-time clock power status, and then check for override.
13h	Reserved

Checkpoint	Description
14h	Program chipset default values into chipset. Chipset default values are MODBINable by OEM customers.
15h	Reserved
16h	Initial onboard clock generator if Early_Init_Onboard_Generator is defined. See also POST 26h.
17h	Reserved
18h	Detect CPU information including brand, SMI type (Cyrix or Intel) and CPU level (586 or 686).
19h	Reserved
1Ah	Reserved
1Bh	Initial interrupts vector table. If no special specified, all H/W interrupts are directed to SPURIOUS_INT_HDLR & S/W interrupts to SPURIOUS_soft_HDLR.
1Ch	Reserved
1Dh	Initial EARLY_PM_INIT switch
1Eh	Reserved
1Fh	Load keyboard matrix (notebook platform)
20h	Reserved
21h	HPM Initialization (notebook platform)
22h	Reserved
23h	1. Check validity of RTC value: e.g. a value of 5Ah is an invalid value for RTC minute. 2. Load CMOS settings into BIOS stack. If Smos checksum fails, use default value instead.
24h	Prepare BIOS resource map for PCI & PnP use. If ESCD is valid, take into consideration of the ESCD's legacy information.
25h	Early PCI Initialization: • Enumerate PCI bus number • Assign memory & I/O resource • Search for a valid VGA device & VGA BIOS, and put it into C000:0
26h	1. If Early_Init_Onboard_Generator is not defined Onboard clock generator initialization. Disable respective clock resource to empty PCI & DIMM slots. 2. Init onboard PWM 3. Init onboard H/W monitor devices
27h	Initialize INT 09 buffer
28h	Reserved
29h	1. Program CPU internal MTRR (P6 & PII) for 0-640K memory address. 2. Initialize the APIC for Pentium class CPU 3. Program early chipset according to CMOS setup. Example: onboard IDE controller. 4. Measure CPU speed.
2Ah	Reserved
2Bh	Invoke Video BIOS
2Ch	Reserved
2Dh	1. Initialize double-byte language font (Optional) 2. Put information on screen display, including Award title, CPU type, CPU speed, full screen logo.

Checkpoint	Description
2Eh	Reserved
2Fh	Rederved
30h	Reserved
31h	Reserved
32h	Reserved
33h	Reset keyboard if Early_Reset_KB is defined e.g. Winbond 977 series Super I/O chips. See also POST 63h
34h	Reserved
35h	Test DMA Channel 0
36h	Reserved
37h	Test DMA Channel 1
38h	Reserved
39h	Test DMA page registers
3Ah	Reserved
3Bh	Reserved
3Ch	Test 8254
3Dh	Reserved
3Eh	Test 8259 interrupt mask bits for channel 1
3Fh	Reserved
40h	Test 8259 interrupt mask bits for channel 2
41h	Reserved
42h	Reserved
43h	Test 8259 functionality
44h	Reserved
45h	Reserved
46h	Reserved
47h	Initialize EISA slot
48h	Reserved
49h	1. Calculate total memory by testing the last double word of each 64K page. 2. Program write allocation for AMD K5 CPU.
4Ah	Reserved
4Bh	Reserved
4Ch	Reserved
4Dh	Reserved
4Eh	1. Program MTRR of M1 CPU 2. Initialize L2 cache for P6 class CPU & program CPU with proper cacheable range. 3. Initialize the APIC for P6 class CPU. 4. On MP platform, adjust the cacheable range to smaller one in case the cacheable ranges between each CPU are not identical.
4Fh	Reserved
50h	Initialize USB Keyboard & Mouse
51h	Reserved
52h	Test all memory (clear all extended memory to 0)

Checkpoint	Description
53h	Clear password according to H/W jumper (Optional)
54h	Reserved
55h	Display number of processors (multi-processor platform)
56h	Reserved
57h	1. Display PnP logo 2. Early ISA PnP initialization - Assign CSN to every ISA PnP device
58h	Reserved
59h	Initialize the combined Trend Anti-Virus code
5Ah	Reserved
5Bh	(Optional Feature) Show message for entering AWDFLASH.EXE from FDD (optional)
5Ch	Reserved
5Dh	1. Initialize Init_Onboard_Super_IO 2. Initialize Init_Onboard_AUDIO
5Eh	Reserved
5Fh	Reserved
60h	Okay to enter Setup utility; i.e. not until this POST stage can users enter the CMOS setup utility.
61h	Reserved
62h	Reserved
63h	Reset keyboard if Early_Reset_KB is not defined.
64h	Reserved
65h	Initialize PS/2 Mouse
66h	Reserved
67h	Prepare memory size information for function call: INT 15h ax=E820h
68h	Reserved
69h	Turn on L2 cache
6Ah	Reserved
6Bh	Program chipset registers according to items described in Setup & Auto-configuration table
6Ch	Reserved
6Dh	1. Assign resources to all ISA PnP devices. 2. Auto assign ports to onboard COM ports if the corresponding item in Setup is set to “Auto”.
6Eh	Reserved
6Fh	1. Initialize floppy controller 2. Set up floppy related fields in 40:hardware
70h	Reserved
71h	Reserved
72h	Reserved
73h	Reserved
74h	Reserved
75h	Detech &install all IDE device: HDD, LS120, ZIP, CDROM...

Checkpoint	Description
76h	(Optional feature) Enter AWDFLASH.EXE if: - AWDFLASH.EXE is found in floppy drive. - ALT+F2 is prrssed.
77h	Detect serial ports & parallel ports
78h	Reserved
79h	Reserved
7Ah	Detect & install co-processor
7Bh	Reserved
7Ch	Init HDD write protect
7Dh	Reserved
7Eh	Reserved
7Fh	Switch back to text mode if full screen logo is supported. - If errors occur, report errors & wait for keys - If no errors occur or F1 key is pressed to continue: Clear EPA or customization logo.
80h	Reserved
81h	Reserved
82h	1. Call chipset power management hook. 2. Recover the text fond used by EPA logo (not for full screen logo). 3. If password is set, ask for password.
83h	Save all data in stack back to CMOS
84h	Initialize ISA PnP boot devices
85h	1. USB final initialization 2. Switch screen back to text mode
86h	Reserved
87h	NET PC: Build SYSID structure
88h	Reserved
89h	1. Assign IRQs to PCI devices. 2. Set up ACPI table at top of the memory.
8Ah	Reserved
8Bh	1. Invoke all ISA adapter ROMs 2. Invoke all PCI ROMs (except VGA)
8Ch	Reserved
8Dh	1. Enable/Disable Parity Check according to CMOS setup. 2. APM Initialization
8Eh	Reserved
8Fh	Clear noise if IRQs
90h	Reserved
91h	Reserved
92h	Reserved
93h	Read HDD boot sector information for Trend Anti-Virus code

Checkpoint	Description
94h	1. Enable L2 cache 2. Program Daylight Saving 3. Program boot up speed 4. Chipset final initialization 5. Power management final initialization 6. Clear screen & dispaly summary table 7. Program K6 write allocation 8. Program P6 class write combining
95h	Update keyboard LED & typematic rate
96h	1. Build MP table 2. Build & update ESCD 3. Set CMOS century to 20h or 19h 4. Load CMOS time into DOS timer tick 5. Build MSIRQ routing table
FFh	Boot attempt (INT 19h)

POST Error Messages List

If you cannot run the diagnostics program tests but did receive a POST error message, use “POST Error Messages List” to diagnose system problems. If you did not receive any error message, look for a description of your error symptoms in “Error Sympton List”.

NOTE: When you have deemed it necessary to replace an FRU, and have done so, you must run a total system check to ensure that no other activity has been affected by the change. This system check can be done through the diagnostics program.

NOTE: Check all power supply voltages, switch, and jumper settings before you replace the main board. Also check the power supply voltages if you have a “system no-power” condition.

NOTE: To diagnose a problem, first find the BIOS error messages in the left column. If directed to a check procedure, replace the FRU indicated in the check procedure. If no check procedure is indicated, the first Action/FRU listed in right column is the most likely cause.

BIOS Messages	Action/FRU
I/O Parity Error	1. System board
CPU Clock Mismatch	1. Enter BIOS Setup and load the default settings. 2. Ensure BIOS setting for processor is set correctly.
Real Time Clock Error CMOS Battery Bad CMOS Checksum Error	1. Enter BIOS Setup and load the default settings. 2. RTC Battery. 3. System Board.
Equipment Configuration Error	1. Ensure the system configuration set in BIOS Setup is correct. 2. Enter BIOS Setup and load the default settings. 3. RTC battery. 4. System board.
System Management Memory Bad Memory Error at MMMM:SSSS:OOOOh	1. Insert the memory modules in the DIMM sockets properly, then reboot the system. 2. Memory module. 3. System board.
RAM Parity Error	1. Enter BIOS Setup to disable parity check. 2. Memory module 3. System board
PS/2 Keyboard Error or Keyboard Not Connected PS/2 Keyboard Interface Error PS/2 Keyboard Locked	1. Re-connect PS/2 keyboard and mouse. 2. Enter BIOS Setup and load the default settings. 3. PS/2 keyboard 4. PS/2 mouse 5. System board
Onboard xxx... Conflict(s)	1. Enter BIOS Setup and load the default settings. 2. Remove all adapter cards that are NOT factory-installed, then reboot the system.
Floppy Disk Controller Error Floppy Drive A Error Floppy Drive B Error	1. Diskette drive cable/connection. 2. Diskette drive. 3. System board
On Board Parallel Port Conflict(s) On Board Serial Port 1 Conflict(s) On Board Serial Port 2 Conflict(s)	1. Enter BIOS Setup and load the default settings. 2. Remove all adapter cards that are NOT factory-installed, then reboot the system.
Floppy Drive(s) Write Protected Hard Disk Drive(s) Write Protected	1. Ensure that the diskette drive is not set to [Write Protected] in the Security Options in BIOS Setup. 2. Load default settings in Setup.

BIOS Messages	Action/FRU
IDE Drive 0 Error IDE Drive 1 Error IDE Drive 2 Error IDE Drive 3 Error	1. Enter BIOS Setup and load the default settings. 2. Check IDE drive jumper. 3. IDE hard disk drive power. 4. IDE hard disk drive cable/connection. 5. IDE hard disk drive.
IRQ Setting Error Expansion ROM Allocation Fail I/O Resource Conflict(s) Memory Resource Conflict(s)	1. Load default settings in Setup. 2. Enter BIOS Setup and set the **Reset Resource Assignments** of the **PnP/PCI Options** to Yes, then reboot the system. 3. Remove all adapter cards that are NOT factory-installed, then reboot the system
PCI Device Error	1. Load default settings in Setup. 2. Enter BIOS Setup and set the **Reset Resource Assignments** of the **PnP/PCI Options** to Yes, then reboot the system. 3. Remove all adapter cards that are NOT factory-installed, then reboot the system.
PS/2 Pointing Device Interface Error PS/2 Pointing Device Error	1. Re-connect PS/2 keyboard and mouse. 2. Enter BIOS Setup and load the default settings. 3. PS/2 mouse 4. PS/2 keyboard 5. System board
DMI Table Was Destroyed	1. Flash BIOS
Press “DEL” key to enter Setup or F1 key to continue	1. Press DEL to enter Setup and reconfigure the system.
Press ESC to turn off NMI, or any key to reboot	1. Press ESC to reject NMI error or press any other key to reboot the system.
Insert system diskette and press ENTER key to reboot	1. Insert a bootable disk into the floppy disk drive or remove this disk if a hard disk is installed.

Error Symptoms List

NOTE: To diagnose a problem, first find the error symptom in the left column. If directed to a check procedure, replace the FRU indicated in the check procedure. If no check procedure is indicated, the first Action/ FRU listed in right column is the most likely cause

.

Error Symptom	Action/FRU
Processor / Processor Fan	
NOTE: Normally, the processor fan should be operative, and the processor clock setting should be exactly set to match its speed requirement before diagnosing any processor problems.	
Processor fan does not run but power supply fan runs.	1. Ensure the system is not in power saving mode. See “Power Management” in chapter 2. 2. With the system power on, measure the voltage of processor fan connector. Its reading should be +12Vdc. 3. System board.
Processor test failed.	1. Processor 2. System board
System Board and Memory	
NOTE: Ensure the memory modules are installed properly and the contact leads are clean before diagnosing any system problems.	
Memory test failed.	1. See "Memory" 2. System board
Incorrect memory size shown or repeated during POST.	1. Insert the memory modules in the DIMM sockets properly, then reboot the system. 2. Memory module. 3. System board.
System works but fails to enter power saving mode when the Power Management Mode is set to Enabled, and power saving timer set in BIOS has elapsed.	1. Enter BIOS Setup and load default settings. In Windows 98, check settings in Power Management Property of Control Panel. 2. Reload software from Recovery CD.
System hangs before system boot.	1. See "Index of Symptoms" 2. See "Undetermined Problems"
System hangs after system boot.	1. Execute a system test and set it to stop at “Halt on Error” to see the potential cause of the problem. 2. See “Undetermined Problems”.
Blinking cursor only; system does not work.	1. Diskette/IDE drive connection/cables 2. Diskette/IDE disk drives 3. See “Undetermined Problems”. 4. System board
Diskette Drive	
NOTE: Ensure the diskette drive is configured correctly in BIOS Setup and its read/write head is clean before diagnosing any diskette drive problems.	
Media and drive are mismatched.	1. Ensure the diskette drive is configured correctly in the Disk Drives of BIOS Setup. 2. Ensure the diskette drive is correctly formatted. 3. Diskette drive connection/cable 4. Diskette drive 5. System board

Error Symptom	Action/FRU
Diskette drive does not work.	1. Ensure the diskette drive is not set to None in the Disk Drives of BIOS Setup. 2. Diskette drive power 3. Diskette drive connection/cable 4. Diskette drive 5. System board
Diskette drive read/write error.	1. Diskette. 2. Ensure the diskette drive is not set to Write protect in the Security Options of BIOS Setup. 3. Diskette drive cable. 4. Diskette drive. 5. System board.
Diskette drive LED comes on for more than 2 minutes when reading data.	1. Diskette 2. Diskette drive connection/cable 3. Diskette drive 4. System board
Diskette drive LED fails to light, and the drive is unable to access for more than 2 minutes.	1. Diskette 2. Diskette drive power 3. Diskette drive connection/cable 4. Diskette drive 5. System board
Diskette drive test failed.	1. Diskette 2. Diskette drive 3. Diskette drive cable 4. System board
Hard Disk Drive	
NOTE: Ensure hard disk drive is configured correctly in BIOS Setup, cable/jumper are set correctly before diagnosing any hard disk drive problems.	
Hard disk drive test failed.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive cable. 3. Hard disk drive. 4. System board.
Hard disk drive cannot format completely.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive cable. 3. Hard disk drive. 4. System board.
Hard disk drive has write error.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive.
Hard disk drive LED fails to light, but system operates normally.	1. With the system power on, measure the voltage of hard disk LED connector. 2. Hard drive LED cable.
CD/DVD-ROM Drive	
NOTE: Ensure CD/DVD-ROM drive is configured correctly in BIOS Setup, cable/jumper are set correctly and its laser beam is clean before diagnosing any CD/DVD-ROM drive problems.	
CD/DVD-ROM drive LED doesn't come on but works normally.	1. CD/DVD-ROM drive
CD/DVD-ROM drive LED flashes for more than 30 seconds before LED shutting off. Software asks to reinstall disc. Software displays a reading CD/DVD error.	1. CD/DVD-ROM may have dirt or foreign material on it. Check with a known good disc. 2. CD/DVD-ROM is not inserted properly. 3. CD/DVD-ROM is damaged.

Error Symptom	Action/FRU
CD/DVD-ROM drive cannot load or eject when the system is turned on and its eject button is pressed and held.	1. Disconnect all cables from CD/DVD-ROM drive except power cable, then press eject button to try to unload the disk. 2. CD/DVD-ROM drive power. 3. CD/DVD-ROM drive
CD/DVD-ROM drive does not read and there are no messages are displayed.	1. CD may have dirt or foreign material on it. Check with a known good disc. 2. Ensure the CD/DVD-ROM driver is installed properly. 3. CD/DVD-ROM drive.
CD/DVD-ROM drive can play audio CD but no sound output.	1. Ensure the headphone jack of the CD/DVD-ROM has an output. 2. Turn up the sound volume. 3. Speaker power/connection/cable. 4. CD/DVD-ROM drive.
Real-Time Clock	
Real-time clock is inaccurate.	1. Ensure the information in the Date and Time of BIOS Setup is set correctly. 2. RTC battery. 3. System board
Audio	
Audio software program invokes but no sound comes from speakers.	1. Speaker power/connection/cable.
Modem	
Modem ring cannot wake up system from suspend mode.	1. Ensure the Modem Ring Indicator in BIOS Setup or Power Management is set to Enabled. 2. If PCI modem card is used, reinsert the modem card to PCI slot firmly or replace the modem card. 3. If ISA modem card is used, ensure the modem ring-in cable from the modem card to system board is connected properly. 4. In Win 98, ensure the telephone application is configured correctly for your modem and set to receive messages and/or fax.
Data/fax modem software program invokes but cannot receive/send data/ fax	1. Ensure the modem card is installed properly.
Fax/voice modem software program invokes but has no sound output. (Data files are received normally; voice from modem cannot be produced, but system sound feature works normally.)	1. Ensure the modem voice-in cable from modem adapter card to system board
Video and Monitor	
Video memory test failed. Video adapter failed.	1. Remove all non-factory-installed cards. 2. Load default settings (if screen is readable). 3. System board

Error Symptom	Action/FRU
Display problem: - Incorrect colors No high intensity Missing, broken, or incorrect characters Blank monitor(dark) Blank monitor(bright) Distorted image Unreadable monitor Other monitor problems	1. Monitor signal connection/cable. 2. Monitor 3. Video adapter card 4. System board
Display changing colors.	1. Monitor signal connection/cable 2. Monitor 3. System board
Display problem not listed above (including blank or illegible monitor).	1. “Monitor". 2. Load default settings (if screen is readable). 3. System board

Error Symptom	Action/FRU
Parallel/Serial Ports	
Execute “Load BIOS Default Settings” in BIOS Setup to confirm ports presence before diagnosing any parallel/serial ports problems.	
Serial or parallel port loop-back test failed.	1. Make sure that the LPT# or COM# you test is the same as the setting in BIOS Setup. 2. Loop-back. 3. System board.
Printing failed.	1. Ensure the printer driver is properly installed. Refer to the printer service manual. 2. Printer. 3. Printer cable. 4. System board.
Printer problems.	1. Refer to the service manual for the printer.
Keyboard	
Some or all keys on keyboard do not work.	1. Keyboard
Power Supply	
Pressing power switch does not turn off system. (Only unplugging the power cord from electrical outlet can turn off the system.)	1. Ensure the Power Switch < 4 sec. in BIOS Setup of Power Management is not set to Suspend. 2. Power switch cable assembly
Pressing power switch does not turn on the system.	1. Ensure the power override switch (situated at the back of the machine, just above the connector for the power cable) is not set to OFF. 2. Power switch cable assembly.
Executing software shutdown from Windows98 Start menu does not turn off the system. (Only pressing power switch can turn off the system).	1. Load default settings. 2. Reload software from Recovery CD.
No system power, or power supply fan is not running.	1. Power Supply 2. System Board
Other Problems	
Any other problems.	1. Undetermined Problems

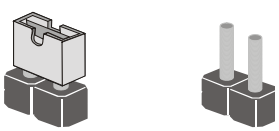
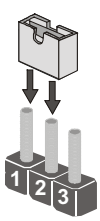
Jumper and Connector Information

Checking Jumper Settings

This section explains how to set jumpers for correct configuration of the mainboard.

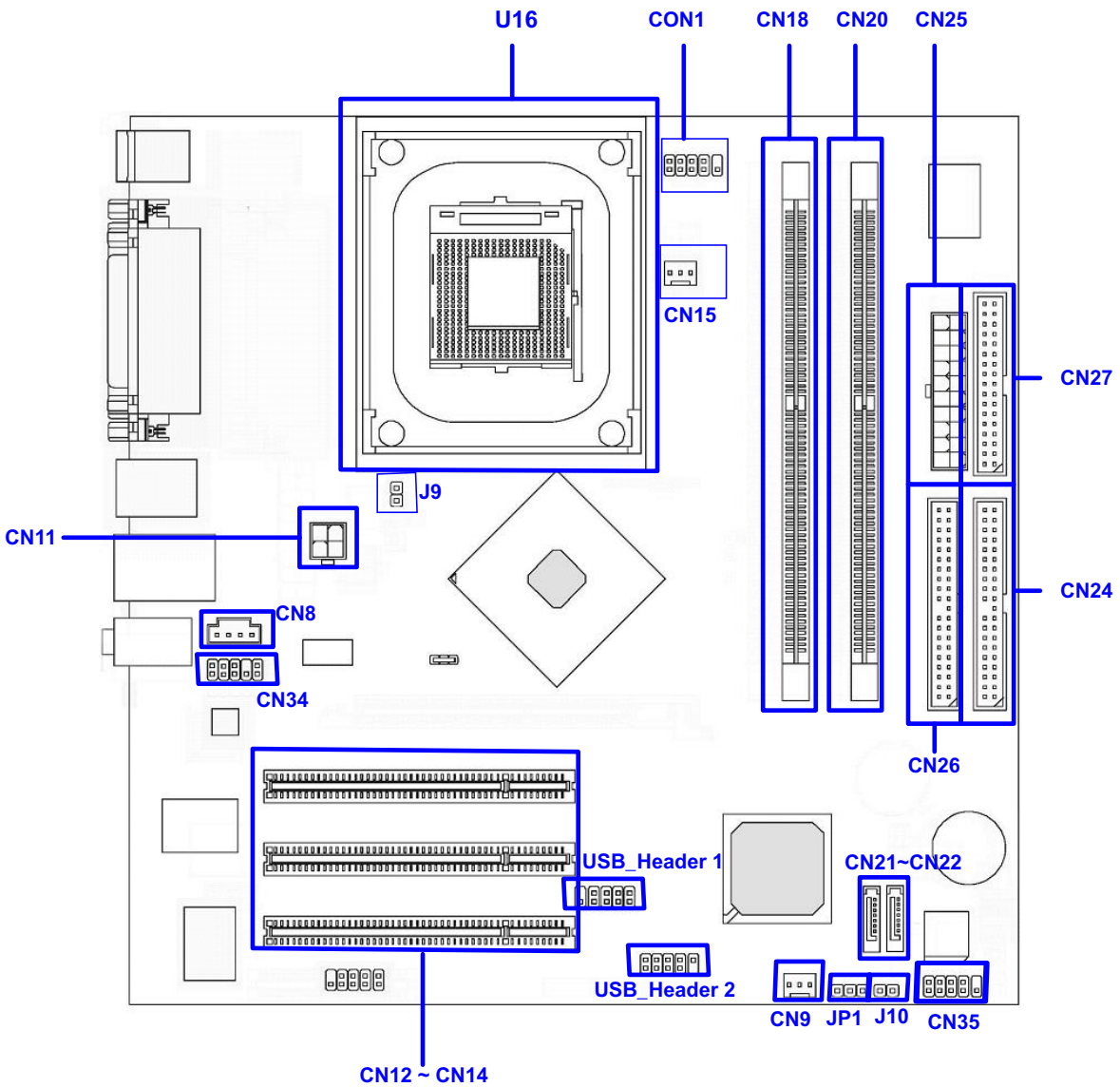
Setting Jumpers

Use the mainboard jumpers to set system configuration options. Jumpers with more than one pir are numbered. When setting the jumpers, ensure that the jumper caps are placed on the correct pins.

Jumper	Description
	The illustrations below show a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is SHORT. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is OPEN.
	This illustration shows a 3-pin jumper. Pins1 and 2 are SHORT.

Connectors and Jumpers

The following illustration shows the location of the mainboard jumpers.



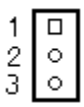
Function Definition

Name	Description	Remark
U16	Intel 478 Socket	
CN18	DIMM1 Connector	
CN20	DIMM2 Connector	
CN14	PCI Slot #1	
CN13	PCI Slot #2	
CN12	CPI Slot #3	
CN25	ATX Power Connector	
CN11	ATX12V Power Connector	
CN27	Floppy Connector	
CN24,26	Reversal on illustration of mainboard jumpers	
CN15	CPU Fan	
CN9	Chassis Fan	
CN35	Front Panel with Intel spec.	
USB_HDER1	USB Header with Intel spec.	
USB_HDER2	USB Header with Intel spec.	
1394_HDER2	IEEE1394 Header	Optional
CN34	Audio Header with Intel spec.	
CN8	CD-IN Header with BOX	
CON1	Serial Port 2 with Internal Header	
CN21	Serial ATA 1 Header	Optional
CN22	Serial ATA 2 Header	Optional
J9	VRM Delec	
J10	FWH Protect	
JP1	Clear CMOS	
CN1	Serial Port 1	
CN2	VGA-Out Connector	
CN3	PS/2 Keyboard and Mouse Connector	
CN4	Parallel Port	
CN5	Rear Audio Connector	
CONN1	USB dual port + IEEE1394 Connector	IEEE1394 optional
CN30	USB dual port + LAN Connector	

Pin Definition

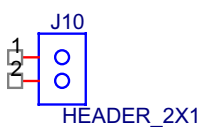
Jumper Setting

JP1:Clear CMOS

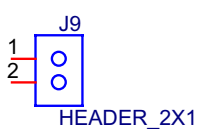
	Location	Header Type	Description	Function
	JP1	Header 3x1	Clear CMOS	1-2: Clear 2-3: Normal

NOTE: If you want to clear CMOS, unplug the AC power supply first, then place the jumper cap on both pins of pin1 & pin2.Set JCC back to the normal status with pin2 & pin3 connected, then power on the system.

J10: FWH Protect

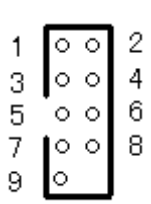
	Pin Number	Pin Definition
	1-2	Lock Boot Block
	Empty	Unlock

J9: VRM Delect

	Pin Number	Pin Definition
	1-2	VRM9
	Empty	VRM10/VRD10.1

Connectors and Headers Definition

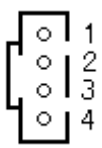
CN33: Front Panel

	Pin Number	Pin Definition	Pin Number	Pin Definition
	1	HD LED+	2	LEDP
	3	HD LED-	4	PMSLED-
	5	GND (Ground)	6	POWER BTN(power button)
	7	RESET	8	GND
	9	NC	10	KEY

CN9,CN15: FAN Connector

Pin Number	Pin Definition
1	GND
2	FAN_POWER12V
3	SIO_FANSPD5V

CD-IN(CN8)

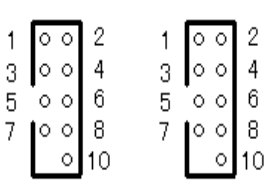
	Pin Number	Pin Definition
	1	CD-L (CD In Left)
	2	CD-GND (Ground)
	3	CD-GND (Ground)
	4	CD-R (CD In Right)

CN34:FRONT AUDIO HEADER

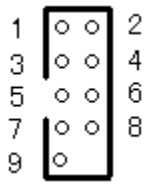
	Pin Number	Pin Definition	Pin Number	Pin Definition
	1	FRONT_MIC	6	FRONT_OUT_R
	2	GND (GROUND)	7	NC (NO CONNECT)
	3	NC	8	NC (NO CONNECT)
	4	+5VA	9	LINE_OUT_L
	5	LINE_OUT_R	10	FRONT_OUT_L

NOTE: A feature of the front panel headphone jack is that the rear panel audio output connctors are disabled when headphones are plugged in. This feature is implemented through the front panel audio header shown in the above figure and Table. If the front panel interface board is not connected to the front panel audio header, pin5 and 6, and 9 and 10 should be jumpered on the the front panel audio header. If these jumpers are not installed, the rear panel audio connectors will be inoperative.

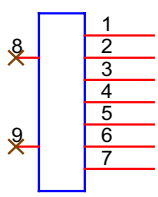
USB_HDER1,USB_HDER2:FRONT USB HEADER

	Pin Number	Pin Definition	Pin Number	Pin Definition
	1	5V_POWER	6	USB_DATA1+
	2	5V_POWER	7	GND (GROUND)
	3	USB_DATA0-	8	GND (GROUND)
	4	USB_DATA1-	9	NC (NO CONNECT)
	5	USB_DATA0+	10	NC (NO CONNECT)

CON1: nd SERIAL PORT HEADER

	Pin Number	Pin Definition	Pin Number	Pin Definition
	1	NDCDB	6	NDSRB
	2	NSINB	7	NRTSB
	3	NSOUTB	8	NCTSB
	4	NDTRB	9	NRIB
	5	GND	10	KEY

CN21, CN22: S- ATA HDD CONNECTOR (RESERVED)

	Pin Number	Pin Definition	Pin Number	Pin Definition
	1	GND (GROUND)	6	SATA_RXN0
	2	SATA_TXP0	7	GND (GROUND)
	3	SATA_TXN0	8	NC (NO CONNECT)
	4	GND (GROUND)	9	NC (NO CONNECT)
	5	SATA_RXN0		

1394_HDER2: INT 1394 HEADER

Pin Number	Pin Definition	Pin Number	Pin Definition
1	TPA+	6	TPB-
2	TPA-	7	+12V
3	GND	8	+12V
4	GND	9	KEY
5	TPB+	10	GND

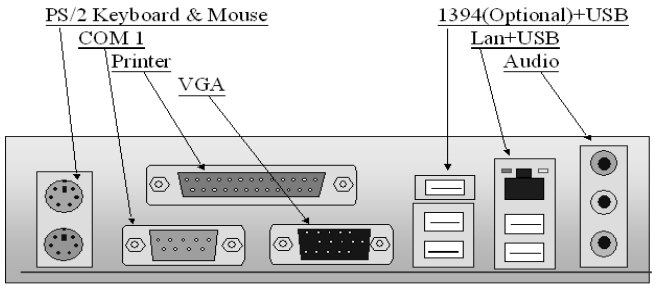
CN25: ATX POWER CONNECTOR

Pin Number	Pin Definition	Pin Number	Pin Definition
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	GND	13	GND
4	+5V	14	PS_ON#
5	GND	15	GND
6	+5V	16	GND
7	GND	17	GND
8	PWR_OK	18	-5V
9	+5V_SB	19	+5V
10	+12V	20	+5V

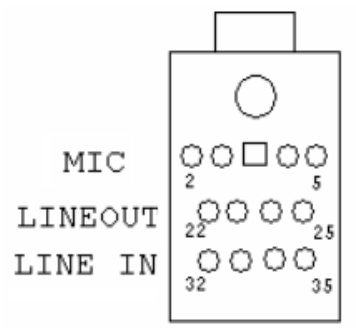
CN11: ATX12V CONNECTOR

Pin Number	Pin Definition	Pin Number	Pin Definition
1	GND	3	+12V
2	GND	4	+12V

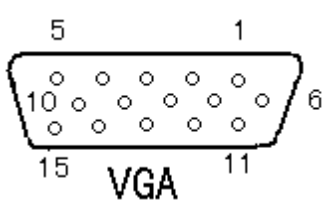
Expansion I/O

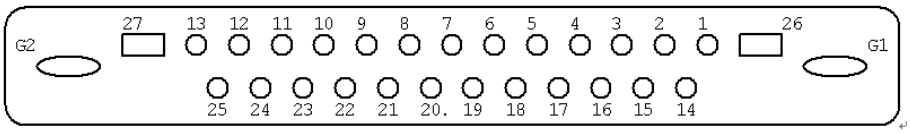


Audio Jack

	Pin Number	Pin Definition
	**MIC IN**	
	2	CEN_BP_OUT AND AVREF
	3	NC
	4	JD0
	5	LFE_BP_OUT
	LINE IN	
	22	FRONT_OUT_L
	23	NC
	24	JD1
	25	FRONT_OUT_R
	LINE OUT	
	32	SURR_BP_L
	33	NC
	34	JD2
	35	SURR_BP_R

VGA Port

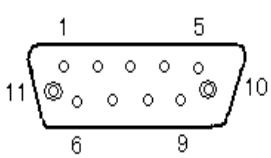
	Pin	Pin Definition	Pin	Pin Definition
	1	Video Red Output	11	NC
	2	Video Green Output	12	L_DDCA_DATA
	3	Video Blue Output	13	5V_HYSNC
	4	NC	14	5V_VSYNC
	5	GND	15	L_DDCA_CLK
	6	GND	16	GND
	7	GND	17	GND
	8	GND	18	GND
	9	5V_SYS	19	GND
	10	GND		



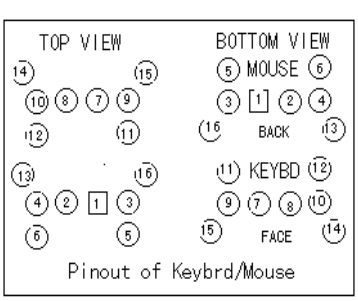
Print Port

Pin Number	Pin Definition	Pin Number	Pin Number
1	STB#	15	-PERROR
2	DATA BUS1	16	-PPRINIT
3	DATA BUS2	17	-PSLCTIN
4	DATA BUS3	18	GND
5	DATA BUS4	19	GND
6	DATA BUS5	20	GND
7	DATA BUS6	21	GND
8	DATA BUS7	22	GND
9	DATA BUS8	23	GND
10	ACK#	24	GND
11	BUSY	25	GND
12	PAPER EMPTY	26,27	GND
13	SELECT	G1	GND
14	PAUTOFD	G2	GND

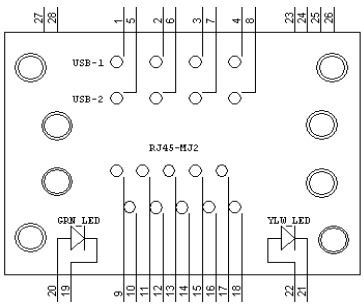
Serial Port

	Pin	Pin Definition	Pin	Pin Definition
	1	NDCDA	7	NRTSA
	2	NSINA	8	NCTSA
	3	NSOUTA	9	NRIA
	4	NDTRA	10	GND
	5	GND	11	GND
	6	NDSRA		

PS/2-KBMS

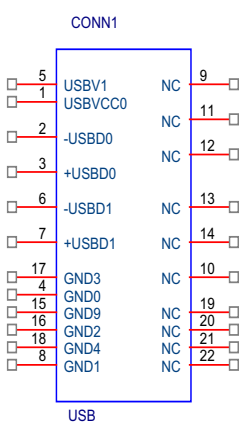
	Pin	Pin Definition	Pin	Pin Definition
	1	KBDATA	10	POWER
	2	NC	11	MSCLK
	3	GND	12	NC
	4	POWER	13	GND
	5	KBCLK	14	GND
	6	NC	15	GND
	7	MSDATA	16	GND
	8	NC	17	GND
	9	GND		

Dual USB&RJ45 CONN



Pin	Pin Definition	Pin	Pin Definition
1	USB PWR	15	NC
2	USBP2N_R	16	NC
3	USBP2P_R	17	NC
4	GND	18	GND
5	USB PWR	19	LINK_LEDJ
6	USBP3N_R	20	+3.3V_SB
7	USBP3P_R	21	ACTIVE_LEDJ
8	GND	22	+3.3V_SB
9	NC	23	GND
10	LTDP_8100	24	GND
11	LTDN_8100	25	GND
12	LRDP_8100	26	GND
13	LRDN_8100	27,28	GND
14	NC	29,30	GND

Dual USB

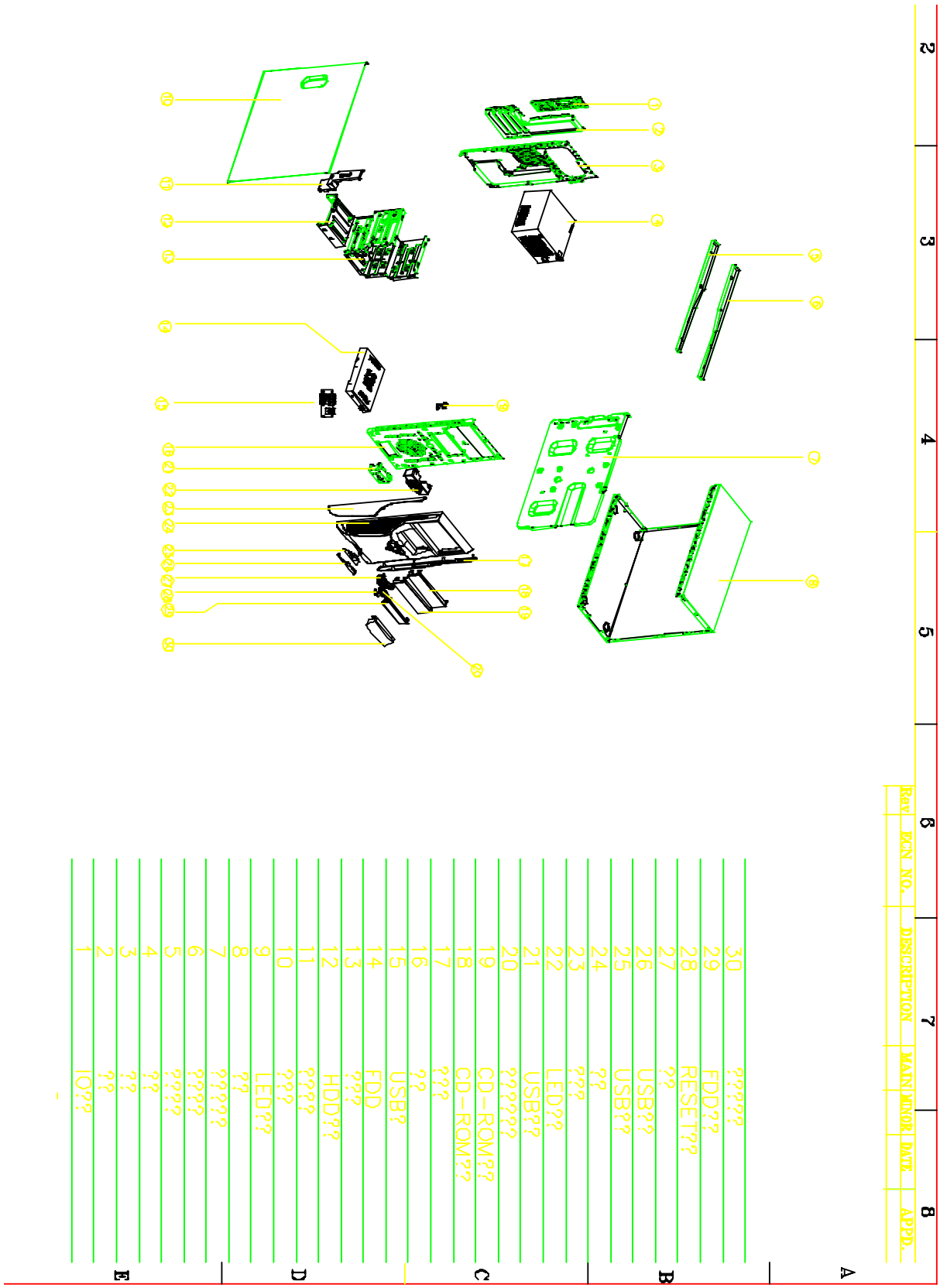


Pin	Pin Definition	Pin	Pin Definition
1	5V_DUAL_F	12	NC
2	USBP0N_R	13	NC
3	USBP0P_R	14	NC
4	GND	15	GND
5	5V_DUAL_F	16	GND
6	USBP1N_R	17	GND
7	USBP1P_R	18	GND
8	GND	19	NC
9	NC	20	NC
10	NC	21	NC
11	NC	22	NC

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of AcerPower F2. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

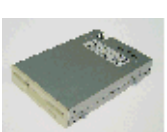
AcerPower F2 Exploded Diagram

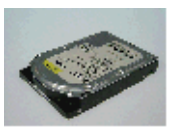
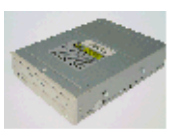


NOTE: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel (http://aicsl.acer.com.tw/spl/, if you do not own a specific account, you can still access the system with guest; guest). For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

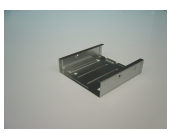
NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how best to dispose it, or follow the rules set by your regional Acer office on how to return it.

AcerPower F2

Picture	Partname	Part No.
Memory		
	DDR266 256MB 0.14U 32MX8*8 NANYA NT256D64S88B0G-75B	KN.25603.012
	DDR266 512MB 0.14U 32MX8*16 NANYA NT512D64S8HB0G-75B	KN.51203.008
	DDR333 256MB INFENION	KN.25602.002
	DDR333 128MB 0.14U 16M*16*4 NANYA NT128D64SH4B1G-6K	KN.12803.005
	DDR333 256MB 0.14U 32M*8*8 NANYA NT256D64S88B1G-6K	KN.25603.008
	DDR333 512MB 0.14U 32M*8*16 NANYA NT512D64S8HB1G-6K	KN.51203.004
	DDR333 256MB MICRON MT8VDDT3264AG-335CA CL2.5	KN.25604.008
	DDR400 128MB INFINEON HYS64D16301GU-5-B	KN.12802.005
	DDR400 256MB INFINEON HYS64D32300GU-5-B	KN.25602.008
	DDR400 512MB INFINEON HYS64D64320GU-5-B	KN.51202.006
	DDR400 256MB NANYA NT256D64S88B1G-5T EA	KN.25603.011
	DDR400 512MB NANYA	TBD
CPU/PROCESSOR		
	CELERON 2.4GHZ/400FSB/128K	KC.DCD01.24A
	CELERON 2.6GHZ/400FSB/128K (MULTIPLE VID)	KC.DCD01.26A
	NORTHWOOD 2.6GHZ/128K/400FSB	KC.DPD01.26A
	NORTHWOOD 2.4GHZ/512K/533FSB	KC.DPD01.24B
	NORTHWOOD 2.8GHZ/512K/533FSB	KC.DPD01.28B
	NORTHWOOD 2.4GHZ/512K/800FSB	KC.DP001.24C
	NORTHWOOD 2.6GHZ/512K/800FSB	KC.DP001.26C
	NORTHWOOD 2.8GHZ/512K/800FSB	KC.DP001.28C
	NORTHWOOD 3.0GHZ/512K/800FSB	KC.DP001.30C
FDD/Floppy Disk Drive		
	FDD 1.44MB PANASONIC JU-256A048P WHITE	KF.25602.002

Picture	Partname	Part No.
HDD/Hard Disk Drive		
	HDDPROTEGE 40G 5400RPM, ATA-100 WD WD400EB-42CPF0 HDD 80G 5400RPM, ATA-100 WD WD800EB-00DJF0 HDD C2 40G 5400 RPM, ATA-100 SEAGATE ST340015A HDD U9 80G 5400 RPM, ATA-100 SEAGATE ST380012A HDD ALPINE 80G 7200RPM, ATA-100 SEAGATE ST380011A HDD ALPINE 120G 7200RPM, ATA-100 SEAGATE ST3120022A HDD XL40S 40G 7200RPM, ATA-100 WD 400BB-00DEA0 HDD XL80S 80G 7200RPM WD WD800BB-00DKA0 HDD XL80 120G 7200RPM WD 1200BB-00DWA0 HDD 40G 7200RPM, ATA-100 HITACHI HDS722540VLAT20 HDD 80G 7200RPM, ATA-100 HITACHI HDS722580VLAT20 HDD 120G 7200RPM, ATA-100 HITACHI HDS7225120VLAT20	KH.04008.004 KH.08008.004 KH.04001.002 KH.08001.002 KH.08001.001 KH.12001.001 KH.04008.002 KH.08008.003 KH.12008.001 KH.04007.007 KH.08007.005 KH.12007.003
CD-ROM/DVD-ROM/CD-RW		
	CD-ROM DRIVE 52X BTC F564E WHITE CD-ROM DRIVE 52X MSI MS-8152 WHITE CD-RW DRIVE 52X24X52X LITE-ON LTR-52246S WHITE DVD-ROM DRIVE 16X PIONEER DVD-121CHF WHITE DVD-ROM DRIVE 16X PIONEER DVD-121RD WHITE DVD-ROM DRIVE 16X LITI-ON XJ-HD166S WHITE DVD-ROM DRIVE 16X HLDS GCR-8162B WHITE COMBO DRIVE 48X HLDS GCC-4480B WHITE DVD DUAL DRIVE 4X NEC ND-1300A WHITE DVD DUAL DRIVE 4X PIONEER DVR-106RD WHITE SUPERMULTI PLUS 4X DVD HLDS GSA-4040B WHITE	KD.52X0A.002 KD.0520B.002 KR.52X01.001 KV.01605.002 KV.16X05.003 KV.16X04.002 TBD KO.48X0A.001 KU.0040B.001 KU.00405.002 KU.0040C.001
Cables		
	IDE HDD CABLE ATA66 40PIN	50.PSPVF.001
	IDE CD-ROM CABLE ATA66 40PIN	50.PSPVF.002
	IDE FDD CABLE 34PIN	50.PSPVF.003

Picture	Partname	Part No.
	AUDIO CABLE 8PIN 2CON	50.S03VF.001
	FRONT INTERNAL USB CABLE	50.S03VF.002
Main board		
	MB P4/865GV/ICH5/2DIMM/3PCI P4/865GV/ICH5/2DIMM/3PCI, with 1394 P4/865GV/ICH5/2DIMM/3PCI, with Acer logo	TBD TBD TBD
Boards/Cards		
	VGA CARD ATI RADEON 9200 (8X) 64MB DDR W/ TV OUT(NTSC), ATX BRACKET FIC VGA CARD ATI RADEON 9200 (8X) 64MB DDR W/ TV OUT(PAL), ATX BRACKET FIC VGA CARD ATI RADEON 9600 128MB DDR W/ TV OUT + DVI (PAL), ATX BRACKET FIC A96 VGA CARD ATI RADEON 9600 128MB DDR W/ TV + DVI OUT (NTSC), ATX BRACKET FIC A96 VGA CARD XABRE200 AGP 8X 32MB, ATX BRACKET	VG.A9207.001 VG.A9207.002 VG.A9607.001 VG.A9607.002 VG.20005.001
	MODEM CARD 56K F-1156I(+)/R12 ATX GVC-AAP MODEM CARD 56K F-1156I(+)/R12 PACIFIC ATX GVC-USA MODEM CARD 56K F-1156I(+)/R12 GVC-AUSTRALIA	FX.56I02.003 FX.56I02.001 FX.56102.005
	USB/ AUDIO DAUGHTER BOARD FOXCONN	55.PSPVF.001
Power Supply		
	POWER SUPPLY 230W W/O PFC FSP FSP200-ATV(A) POWER SUPPLY 230W W PFC FSP 200-ATV(A)(PF)	PY.23008.003 PY.23008.004
Case/Cover/Bracket Assembly		
	FRONT BEZEL W/ POWER BUTTON, 5.25" 3.5" EMPTY COVER, USB DOOR	60.P01VF.001
	POWER BUTTON	42.PSPVF.001
	SIDE DOOR	60.PSPVF.002
	CHASSIS W/ I/O BRACKET	60.P01VF.002
	I/O BRACKET	33.S03VF.001
	RETENTION MODULE	TBD

Picture	Partname	Part No.
	LED MODULE	42.P01VF.001
	EMPTY COVER FOR 5.25" DEVICE	42.PSPVF.005
	HDD BRACKET	33.PSPVF.002
	FILLER COVER FOR 3.5" DEVICE	42.PSPVF.007
Peripheral		
	MOUSE PS2 2 BUTTON+WHEEL KYE POWER SCROLL PS2 WHITE	MS.PSE04.003
	OPTICAL MOUSE USB 2 BUTTON+WHEEL WHITE	MS.PSE04.001
	PS/2 KEYBOARD, KBP2971, US VER., 104KEYS	KB.KBP03.003
	PS/2 KEYBOARD, KBP2971, T.CHINESE VER., 104KEYS	KB.KBP03.010
	PS/2 KEYBOARD, KBP2971, ARABIC VER., 104KEYS	KB.KBP03.008
	PS/2 KEYBOARD, KBP2971, THAI VER., 104KEYS	KB.KBP03.005
	PS/2 KEYBOARD, KBP2971, SPANISH/US VER., 105KEYS	KB.KBP03.025
	PS/2 KEYBOARD, KBP2971, INT'L US VER., 104KEYS	KB.KBP03.006
	PS/2 KEYBOARD, KBP2971, CANADIAN/FRENCH VER, 105KEYS	KB.KBP03.028
	PS/2 KEYBOARD, KBP2971, BRAZILIAN VER., 107KEYS	KB.KBP03.032
	PS/2 KEYBOARD, KBP2971, UK VER., 104KEYS	KB.KBP03.027
	PS/2 KEYBOARD, KBP2971, FRENCH VER., 105KEYS	KB.KBP03.013
	PS/2 KEYBOARD, KBP2971, GERMANY VER., 105KEYS	KB.KBP03.014
	PS/2 KEYBOARD, KBP2971, ITALIAN VER., 105KEYS	KB.KBP03.012
	PS/2 KEYBOARD, KBP2971, SWISS VER., 105KEYS	KB.KBP03.002
	PS/2 KEYBOARD, KBP2971, SWEDEN VER., 105KEYS	KB.KBP03.029
	PS/2 KEYBOARD, KBP2971, BELGIUM VER., 105KEYS	KB.KBP03.009
	PS/2 KEYBOARD, KBP2971, DUTCH VER., 105KEYS	TBD
	PS/2 KEYBOARD, KBP2971, HOLLAND VER., 105KEYS	KB.KBP03.021
	PS/2 KEYBOARD, KBP2971, SPANISH VER., 105KEYS	KB.KBP03.025
	PS/2 KEYBOARD, KBP2971, PORTUGESE VER., 105KEYS	KB.KBP03.022
	PS/2 KEYBOARD, KBP2971, ICELAND VER., 105KEYS	KB.KBP03.019
	PS/2 KEYBOARD, KBP2971, NORWEGIAN VER., 105KEYS	KB.KBP03.020
	PS/2 KEYBOARD, KBP2971, HEBREW VER., 105KEYS	KB.KBP03.015
	PS/2 KEYBOARD, KBP2971, POLISH VER., 105KEYS	KB.KBP03.016
	PS/2 KEYBOARD, KBP2971, SLOVENIAN VER., 105KEYS	KB.KBP03.017
	PS/2 KEYBOARD, KBP2971, SLOVAKIAN VER., 105KEYS	KB.KBP03.018
	PS/2 KEYBOARD, KBP2971, TURKEY VER., 105KEYS	KB.KBP03.023
	PS/2 KEYBOARD, KBP2971, RUSSIAMVER., 104KEYS	KB.KBP03.024
	PS/2 KEYBOARD, KBP2971, HUNGARIA VER., 105KEYS	KB.KBP03.030
	PS/2 KEYBOARD, KBP2971, GREEK VER., 104KEYS	KB.KBP03.031

Picture	Partname	Part No.
	USB Keyboard, KU0355, US Ver., 104keys	KB.KUP03.002
	USB Keyboard, KU0355, T.Chinese Ver., 104keys	KB.KUP03.003
	USB Keyboard, KU0355, Arabic Ver., 104keys	KB.KUP03.008
	USB Keyboard, KU0355, Thai Ver., 104keys	KB.KUP03.005
	USB Keyboard, KU0355, Spanish/US Ver., 105keys	KB.KUP03.004
	USB Keyboard, KU0355, Int'l US Ver., 104keys	KB.KUP03.006
	USB Keyboard, KU0355, Canadian/French Ver., 105keys	KB.KUP03.028
	USB Keyboard, KU0355, Brazilian Ver., 107keys	KB.KUP03.032
	USB Keyboard, KU0355, UK Ver., 104keys	KB.KUP03.027
	USB Keyboard, KU0355, French Ver., 105keys	KB.KUP03.013
	USB Keyboard, KU0355, Germany Ver., 105keys	KB.KUP03.014
	USB Keyboard, KU0355, Italian Ver., 105keys	KB.KUP03.012
	USB Keyboard, KU0355, Swiss Ver., 105keys	KB.KUP03.001
	USB Keyboard, KU0355, Swedish Ver., 105keys	KB.KUP03.029
	USB Keyboard, KU0355, Belgium Ver., 105keys	KB.KUP03.009
	USB Keyboard, KU0355, Dutch Ver., 105keys	KB.KUP03.021
	USB Keyboard, KU0355, Holland Ver., 105keys	KB.KUP03.025
	USB Keyboard, KU0355, Spanish Ver., 105keys	KB.KUP03.022
	USB Keyboard, KU0355, Portugese Ver., 105keys	KB.KUP03.019
	USB Keyboard, KU0355, Iceland Ver., 105keys	KB.KUP03.020
	USB Keyboard, KU0355, Norwegian Ver., 105keys	KB.KUP03.015
	USB Keyboard, KU0355, Hebrew Ver., 105keys	KB.KUP03.016
	USB Keyboard, KU0355, Polish Ver., 105keys	KB.KUP03.017
	USB Keyboard, KU0355, Slovenian Ver., 105keys	KB.KUP03.018
	USB Keyboard, KU0355, Slovakian Ver., 105keys	KB.KUP03.023
	USB Keyboard, KU0355, Turkey Ver., 105keys	KB.KUP03.024
	USB Keyboard, KU0355, RussiamVer., 104keys	KB.KUP03.030
	USB Keyboard, KU0355, Hungaria Ver., 105keys	KB.KUP03.031
	USB Keyboard, KU0355, Greek Ver., 104keys	KB.KUP03.034
Speaker		
	SPEAKER USB 3" *2 NEOSONICA THYME510 WHITE	SP.51004.001
Fansink		
	CPU FANSINK P4 478 2.8G (AND BELOW) FOXCONN PKP111G01D32 W/ LATCH CPU FANSINK P4 478 FOR 3.0GHZ CPU (AND ABOVE) FOXCONN PKP159GB1D22 + 92X92X25	HI.1110B.001 TBD
Foot Stand		
	RUBBER FOOT	47.P01VF.001
Screws		
	M/B, USB BOARD SCREW	86.PSPVF.001
	FDD, CD-ROM SCREW	86.PSPVF.002
	CHASSIS SCREW	86.PSPVF.003
	SPS SCREW	86.PSPVF.004

Model Definition and Configuration

The AcerPower F2 Model No. Define:

1. Trade Mark:

2. Brand Name: Acer
3. Description: Intel Pentium 4/Celeron Processor
4. Product Name: AcerPower F2

Test Compatible Components

This computer's compatibility is a test plan released by Acer Internal Testing Department. Once the final report is available, this chapter will be revised accordingly.

Microsoft Windows XP Home Environment Test

Item	Specifications	Description
Mainboard		
Foxconn	F62V w/o 1394 w/i Acer LOGO w/i rear I/O bracket	F62V w/i Acer logo
	F62V-2 w/i 1394 Acer LOGO w/i I/O bracket	F62V-2 w/i Acer logo
	F62V w/o 1394 w/o Acer LOGO w/i rear I/O bracket	F62V
	F62V-2 w/i 1394 w/o Acer LOGO w/i rear I/O bracket	F62V-2
CPU		
Intel (400FSB)	Celeron 2.4GHz/400FSB/128K	SL6VU,RK80532RC056128
	Celeron 2.5GHz/400FSB/128K	SL6ZY,RK80532RC060128
	Celeron 2.6GHz/400FSB/128K(Multiple VID)	SL6V3,RK80532RC064128
	Celeron 2.8GHz/400FSB/128K	RK80532RC072128
	P4 2.5GHz/400FSB/512K	RK80532PC060512
	P4 2.6GHz/400FSB/512K	SL6PP,RK80532PC064512
Intel(533FSB)	Northwood 2.4GHz/512K/533FSB	SL6PC,RK80532PE056512
	Northwood 2.66GHz/512K/533FSB	SL6PE,RK80532PE067512
	Northwood 2.8GHz/512K/533FSB	SL6PF,RK80532PE072512
	Prescott 2.8GHz/512K/533FSB	TBD
Intel(800FSB)	Northwood 2.4Ghz/512K/800FSB	SL6WF
	Northwood 2.6GHz/512K/800FSB	SL6WH,RK80532PG064512
	Northwood 2.8GHz/512K/800FSB	SL6WJ
	Northwood 3.0GHz/512K/800FSB	SL6WK,RK80532PG080512
	Northwood 3.2GHz/512K/800FSB	SL6WG,RK80532PG088512
	Prescott 2.8GHz/512K/800FSB	TBD
	Prescott 3.0GHz/512K/800FSB	TBD
	Prescott 3.2GHz/512K/800FSB	TBD
	Prescott 3.4GHz/512K/800FSB	TBD
	Prescott 3.6GHz/512K/800FSB	TBD
CPU Fan Sink		
Foxconn	Foxconn P4 478 fan sink for 2.8GHz CPU	PKP111G01D32 PKP111G01K12
	Foxconn P4 478 fan sink for 3.0GHz CPU	PKP159GB1K12+PV983DG3BC2 011 92X92X25 system PKP159GB1D22+PV983DG3BC2 011 92x92x25 system
DIMM (DDR-333)		
Nanya	DDR 333 128MB 0.14μ 16Mx16x4	NT128D64SH4B1G-6K
	DDR 333 256MB 0.14μ 32Mx8x8	NT256D64S88B1G-6K
	DDR 333 512MB 0.14μ 32Mx8x16	NT512D64S8HB1G-6K
Micron	DDR 333 256MB	MT8VDDT3264AG-335CA CL2.5
DIMM (DDR-400)		
Infineon	DDR 400 128MB	HYS64D16301GU-5-B

Item	Specifications	Description
	DDR 400 256MB	HYS64D32300GU-5-B
	DDR 400 512MB	HYS64D64320GU-5-B
	DDR 400 256MB	NT256D64S88B1G-5T EA
	DDR 400 512MB	NT512D64S8HB1G-5T
HDD(5400RPM)		
WD	Protege 40G 5400rpm,ATA-100	WD400EB-42CPF0
	WD 80G 5400rpm,ATA-100	WD800EB-00DJF0
Seagate	C2 40G 5400rpm, ATA-100	ST340015A
	U9 80G 5400rpm, ATA-100	ST380012A
HDD(7200RPM)		
Seagate	Alpine 80G 7200rpm, ATA-100	ST380011A
	Alpine 120G 7200rpm, ATA-100	ST3120022A
WD	XL40S 40G 7200rpm, ATA-100	WD800BB-00DKA0
	XL80S 80G 7200rpm	WD800BB-00DKA0
	XL80 120G 7200rpm	1200BB-00DWA0
Hitachi	40G 7200rpm, ATA-100	Vancover III HDS722540VLAT20
	80G 7200rpm, ATA-100	Vancover III HDS722580VLAT20 80G 7200 rpm
	120G 7200rpm, ATA-100	Vancover III HDS722580VLAT20 120G 7200rpm
CD-ROM		
BTC	52x	F564E (white)
	52x	F564E (black)
MSI	52x	MS-8152(white)
	52x	MS-8152(black)
CD-RW		
Liteon	52x/24x/52x	LTR-52246S(white)=CW224 LTR-52246S(white)=CW224
DVD		
Pioneer	16x/40x	DVD-121RD(white)
	16x/40x	DVD-121RD(black)
	16x/40x	DVD-121CHF(white)
	16x/40x	DVD-121CHF(black)
Combo		
HLDS	48x Combo(white)	GCC-4480B(white)
	48x Combo(black)	GCC-4480B(black)
DVD Dual		
NEC	4X DVD Dual, Acer color, w/o acer logo (white)	ND-1300A (white)
	4x DVD Dual, Acer color, w/o acer logo (black)	ND-1300A (black)
Pioneer	4x DVD Dual, Acer color, w/o acer logo (white)	DVR-106RD (black)
	4x DVD Dual, Acer color, w/o acer logo (black)	DVR-106RD (black)

Item	Specifications	Description
SuperMultiPlus		
HLDS	4x DVD SuperMulti Plus(white)	GSA-4040B(white)
	4x DVD SuperMulti Plus(blac)	GSA-4040B(black)
Modem Card		
GVC	F-1156I(+)/R12-AAP	TBD
	F-1156I(+)/R12-USA	TBD
	F-1156I(+)/R12-Australia	TBD
Housing		
Foxconn	Microtower/3x3.5”+2x5.25” (black) w/APF2 bezel	H634
	Microtower/3x3.5”+2x5.25” (black) w/ APFT100 bezel	H633
	Microtower/3x3.5”+2x5.25” (black) w/ AST310 bezel	H632
SPS		
FSP	FSP200-ATV(A), 230W non-PFC SPS	TBD
	FSP200-ATA(A)(PF),230W PFC SPS	TBD
FDD		
Panasonic	1.44M 3.5”(white)	JU-256A048PC
	1.44M 3.5”(black)	JU-256A198PC
7-in-1 card reader		
ECS	3.5”(black) 7-in-1 card reader	UCR-61
	3.5” (black) 7-in-1 card reader	UCR-61, w/1394
Daughter Board		
Foxconn	USB/Audio daughter board	TBD
Mouse		
KYE	PS/2 mouse, 2 button+wheel(white)	PowerScroll PS2 (white)
	PS/2 mouse, 2 button+wheel(silver)	PowerScroll PS2 (black)
	USB optical mouse, 2 button+wheel(white)	PowerScroll USB(white)
	USB optical mouse, 2 button+wheel(black)	PowerScroll USB(silver)
Speaker		
Neosonica	USB, 3”x2	Thyme510(white)
	USB, 3”x2	Thyme510(black)

Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- User's manuals
- Training materials
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.